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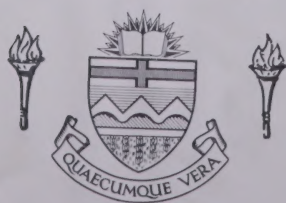
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THE UNIVERSITY OF ALBERTA

AN EXPERIMENTAL AND DEVELOPMENTAL STUDY

OF PERSON PERCEPTION

BY



MANJULI GON

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

SPRING 1970





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UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "An Experimental and Developmental Study of Person Perception" submitted by Manjuli Gon in partial fulfilment of the requirements for the degree of Doctor of Philosophy.



## ABSTRACT

The purpose of the present investigation was to study the effects of age as an organismic and as an ecological variable on the content and structure of person perception. Perception was analyzed in terms of two characteristic processes, namely, differentiation and modes of organization. The major theoretical assumption was that the patterns of differentiation and organization in person perception undergo significant transformation as a function of interaction between age distance between the perceivers and the observed persons. Six specific hypotheses were derived from this major theoretical assumption.

The sample consisted of eighty-one girls from three different age groups of twenty-seven subjects each. Three movies were made representing some representative interactional themes in these three age groups.

The results showed that developmental transformation in person perception, instead of being only an additive process, shows trends towards expansion and articulation within dimensions. It was also found that the initial age distance between the perceiver and the perceived person tended to generate very significant differences in the frequency with which levels or sub-categories within different dimensions were used. However, when similar kinds of dimensions and sub-categories were used, the total content





seemed to vary in terms of differential patterns of modes of organization. This lack of concordance in the use of perceptual modes among the different perceiver groups shows both qualitative as well as quantitative discontinuity in genetic transformations of perceptual modes for integrating information about others.

The results suggest that age as an ecological variable acquires differential patterns of stimulus potentiality and salience, which activate certain sets of dimensions and organizational modes, which may in turn tend to activate a second or third order combination of dimensions and modes. In the case of the younger children the descriptions did not change much when the age distance from the observed persons was varied; concrete and functional descriptions were characteristic throughout, with the 5-6 year olds using more concrete, and the 10-11 year olds using more functional language. However, in the case of the 15-16 year olds there were marked differences. While in describing persons of their own age group they used more abstract dimensions and higher modes of organization, in describing younger children they showed a marked tendency to use relatively more concrete dimensions as well as more descriptive and evaluative modes; this was often accompanied by linguistic simplifications through affective rather than representational use of language.



TO MY MOTHER





## ACKNOWLEDGEMENTS

As I offer this work in its present form I wish to express my indebtedness and gratitude to all those who contributed towards transforming some of my vague hunches and curiosities into an interesting theoretical question.

It is impossible to express fully my deep sense of gratitude to Dr. W.H.O. Schmidt for his kind understanding, active concern and valuable guidance, without which this work would have never been completed.

I gratefully acknowledge the stimulating thoughts, insightful comments and encouragements received from Dr. L. Von Bertalanffy; the great help received from Dr. J. Bishop, both in practical matters and in theoretical discussions, and the penetrating comments of Dr. J. Chambers at various stages of this research.

I also owe a large debt to all those who participated in the study as subjects and enabled me to encounter the phenomenon as a deeply enjoyable learning experience. I am also grateful to those friends who acted as experimenters and shared the work with me.

For permission to collect data in the institutions under their jurisdiction I am particularly indebted to the Edmonton Separate School System and to the Parks and Recreation Department of the City of Edmonton.



I am also grateful to the Audio-Visual Division of the University of Alberta for the great amount of technical help given, especially in the preparation of the movies.

I am grateful to the Association of Universities and Colleges of Canada, the Canadian Commonwealth Scholarship and Fellowship Committee and the Ministry of Education, Government of India for the award that made it possible to carry out the research here in Canada.

I wish to thank The Canadian Commonwealth Scholarship and Fellowship Committee once again for sponsoring my visits to the Department of Psychology, Clark University, and the Institute of Child Study, University of Toronto, for the purpose of research consultation. I am extremely grateful to the members of the staff at Clark University, especially Dr. W.H. Crockett, Dr. T. Dembo, Dr. B. Kaplan, Dr. S. Wapner and Dr. J.F. Wohlwill for all the stimulating discussions, valuable comments and encouragements to carry on this kind of research. I wish to thank Dr. Mary L. Northway and other members of the staff at the Institute of Child Study, University of Toronto, for the many interesting and constructive discussions.

I also wish to extend my sincere appreciation and gratitude to Mr. G. Nakamura for all his help in the innumerable details of preparing the final manuscript.





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## CHAPTER I

### THE PROBLEM

#### I. INTRODUCTION TO THE GENERAL PROBLEM OF PERSON PERCEPTION

Life as a continuous process of participation and becoming in a consistently changing interpersonal world has always commanded not only "knowledge about" but also "acquaintance with" (William James, 1890, p. 221), and understanding of one's fellow beings. It is immanent in human nature to be oriented towards the other person, and towards knowing the other person, and the individual human being unfolds and actualizes himself through this process of relating to, and getting to know the other person.

The processes through which one comes to know another person have been variously referred to as empathy, socio-sympathy, recipathy, impression formation, social intelligence, social judgment, social perception and so on (Asch, 1952; Bruner and Tagiuri, 1954; Bronfenbrenner et al, 1958; McDavid and Harari, 1968). However, in current psychological literature, it is most frequently designated as 'person perception' or 'interpersonal perception'. Tagiuri (1958) proposes to use the term 'person perception' whenever the perceiver regards the object as having the potential of representation and intentionality. The problem of person



perception, thus, focuses on the processes through which one person perceives another person or groups of persons in reciprocity. It seeks to understand the qualities, determinants, and consequences of interpersonal perceptual structures that may emerge in any given interpersonal situation and go beyond the immediately given stimulus information.

## II. HISTORICAL BACKGROUND AND EMERGENCE OF THE PROBLEM

Being rooted as it is in man's very characteristic primordial urge to know about others, the problem of person perception is as old as the history of the growth and evolution of human experience. The deceptive obviousness and interdisciplinary nature of the problem delayed its adequate appreciation by the so-called systematic psychology. However, person perception received much attention in common-sense psychology contained in the literatures, folklores, metaphors and music of different cultures. These symbolic expressions, from time to time, have beautifully expressed the various ways of conceptualizing, controlling, and predicting different patterns of perceptual reciprocity (Heider, 1958). Baldwin et al (1969) have very appropriately described these as constituting a 'cultural code' which requires explication of its implicit structure through the analysis of the connotative aspects of the linguistic





expressions.

The hunches and hypotheses of common-sense psychology had to face many philosophical and scientific polemics (Allport, 1954, 1961; Bronfenbrenner et al, 1958; Heider, 1958; Sarbin et al, 1960; Baldwin et al, 1969). However, due to their direct emanation from the experiences and intuitions of everyday living they succeeded in becoming the oft recognized roots of scientific psychology. The problem of person perception or interpersonal perception, thus, does not lack either in facts or foundation. But new developments in psychology and other related fields demanded greater conceptual clarity, detection of hidden assumptions and identification of equivalent theories.

Most of the assumptions, concepts, and methods of the contemporary psychology of person perception seem to have been derived from epistemology, biology, physics, political science, sociology and psychology in general. Increasing explorations in the various areas within psychology, such as personality, perception, motivation, social processes, sociometry and clinical psychology contributed considerably toward a clearer understanding of the problem (Allport, 1961; Bronfenbrenner, et al, 1958; Asch, 1952; Heider, 1958; Bruner, 1951; Cauch, 1962; Murray, 1959; Rogers, 1959; Sarbin, et al, 1960; Bieri, et al, 1966; Crockett, 1965). Mathematical influences through the use of Information theory (Schroder, 1967) and Graph theory (Harary and Norman, 1953), multi-



dimensional scaling (Hays, 1958), Todd and Rapaport (1964) Jackson (1969) and several others have brought forth the possibility of increasing precision and communicability in the interpretation of interpersonal perceptual data.

This, however, does not imply or require that the legacies of the classical or common-sense psychology should be disowned or discarded. Neither does it require the rejection of the phenomenology or its language; for the language of dynamic human experiences cannot be reduced to a set of symbols or calculus, just for the sake of convenience in talking about them. Besides, the diverse concepts, models, and techniques, representing different types of subject-matters and different levels of scientific development, must be thoroughly checked to ensure their adequacy for explaining the problem of person perception without changing or reducing its meaning.

An examination of the current trends in the studies on person perception shows some deep-rooted diversities both in objects of concern as well as in methods. At this point, a backward look into the history of the evolution of these problems may be useful for understanding them in their proper perspective. The conceptual foundations of most of the studies can be traced back to three distinctive traditions within the history of psychology, namely: (a) the Anglo-American tradition in cognitive theory coming from the British Empiricists and Associationists (Hume, Locke, Hamilton, Mill



and others); (b) the continental tradition coming from phenomenology and from the doctrine of 'active intellect', conceptualized variously by Leibniz, Kant, Dilthey, Bergson, Kohler, Krueger and Sander; (c) functionalism originally coming from Aristotle but later on influenced by Darwinian trends of thinking. The first two traditions led to the development of two distinctive forms of structuralism, very appropriately described by MacLeod as the Newtonian and the Non-Newtonian forms of structuralism (MacLeod, 1960).<sup>1</sup>

The Newtonian structuralism of Locke and his followers was primarily based upon the assumption of the primacy of mental elements, analogous to the material particles of Newtonian physics, which could be welded together with the residues of the previous sensations into an experience having the appearance of objectivity. Thus the main emphasis in the Lockian theories has been on the role of inference, association and syllogistic reasoning in knowing other's minds. The same elementaristic trends were imported to the United States by the British psychologist Titchener through his Core-context theory of perception. Perception for all these psychologists has been:

$$\begin{aligned} &\text{sensory core} + \text{association}_1 + \text{association}_2 + \\ &\text{association}_n = \text{understanding (Allport, 1937).} \end{aligned}$$

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<sup>1</sup>Detailed discussion of these traditions will be found in Wolman (1960), Allport (1937, 1961).





The characteristic preoccupation of these Newtonian psychologists with the analysis of the content of consciousness in terms of elements and the assumption of a thoroughgoing and unequivocal dependence of such elements on specific stimuli, led to the development of several biases that still seem to dominate many contemporary trends in the area of person perception (Allport, 1961; Notcutt and Silva, 1951; MacLeod, 1947, 1960; Sander, 1930; Gollin, 1960). Secondly, they neglected one of the most important aspects of the problem of perception, namely its development, since the basic object of their concern, i.e., the "elements" do not develop, though they may aggregate in varying numbers, and arrange themselves variously in complex patterns (Sander, 1930; Kaplan, 1967, 1969).

Thus, the predominantly Newtonian psychology of Locke and Titchener led to the development of perceptual theories based exclusively on the analysis and description of adult subjects without any enquiry into their genetic or social conditions. The Berlin school of Gestalt psychology could not contribute much toward the understanding of the development of person perception owing to its non-genetic orientation. However, the Leipzig School of Gestalt psychology under the lead of Krueger, Sander and Volkelt, opened up new horizons for some of the subsequent studies in the field of person perception through their emphasis on the totality of experience and the essentially developmental nature of the



organismic substratum in which all psychological functions occur (Sander, 1930; Krueger, 1928). One finds an excellent synthesis of these two schools in Heinz Werner (Witkin, 1966; Werner, 1948, 1957; Werner and Kaplan, 1963; Kaplan, 1967).

There arose two other significant lines of thinking quite similar to the above-mentioned ones, that had considerable impact on the much needed recognition of the essential humanness of the stimulus object in person perception. Lipps through his concept of 'Einfühlung' (i.e., 'feeling oneself into' translated as 'empathy' by Titchener), strongly stressed that a unitary object demands a unitary perception and that the unity of the other is not merely gluing together, as it were, of fragments from one's own inferences but something demanded by the object itself (Allport, 1961).

Spranger spoke about knowing the other through 'Verstehen', which he defined as the mental activity that grasps the events as fraught with meaning in relation to a totality. Such understanding is always accompanied by the identification of the other's intentions or constellation of values which constitute the core of the personality. Thus, the main emphasis in the continental tradition has been on the totality and configurational nature of person perception.



The earliest studies recognized by psychology in this area, showed an impact of functionalism predominantly Darwinian in nature, as it had rejected its foundation in Aristotelian teleology. Though one may find lurking 'entelechies' in the popular concepts of 'needs' and 'drives' in relation to perception, a closer examination of these functional theories of perception shows that they are basically concerned with the 'why' of the perceptual experiences, with their primary emphasis on the adaptive functions of perception. This clearly indicates the impact of Darwinian ideas according to which the world exists outside the person, and perceiving is one of the ways of coming to terms with it. Secondly, the emphasis on the accuracy of judgment, extending from the Lockian inference theory of knowledge, and their overconcern with the veridicality of perceptual reports, tended to neglect the process as well as the quality of perceptual experience in interpersonal situations.

### III. SOME REPRESENTATIVE STUDIES ON PERSON PERCEPTION IN PSYCHOLOGY

The earliest studies in this area were concerned with the problem of recognition of emotions, focussing on the nature of discrimination demanded of the subject in the emotion judging task. Most notable among these studies were those by Darwin (1872), Ruckmick (1921), Munn (1940), and



Schlosberg (1951). Another related line of research was concerned with the studies in expressive movements (Allport and Vernon, 1933; Wolff, 1943).<sup>2</sup>

Around 1950, with the advent of the 'New Look' approach in perception in the Anglo-American tradition of functionalism, there was increasing emphasis on the role of personality and social factors in perception. The primary focus of these studies has been on the individual differences in ability to judge others, leading to several studies dealing with the measurement of the abilities and skills of judges in knowing or evaluating another person or group of persons. Several attempts were made to find out the correlation between these skills or abilities, taking into account such factors as sex, age, intelligence, etc., of the judges, while no consideration was given to the existence of similar factors on the side of the perceived person or groups.<sup>3</sup>

Another important branch of studies dealt with the role of prestige suggestion in social perception (Asch, 1952). One of the most extensively explored aspects of person perception has been the problem of the accuracy of perception that emerged around the middle 1950's; this resulted from

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<sup>2</sup>Excellent surveys of research on these problems are given in Bruner and Tagiuri (1954); Allport (1961).

<sup>3</sup>Extensive surveys of such studies are given by Taft (1955); Bruner and Tagiuri (1954); Bronfenbrenner, et al, (1958); Shrauger and Altrocchi (1964) and McDavid and Harary (1968).





the criticism by Gage and Cronbach and others in their search for the "pure" accuracy scores (Cline, 1964), of the naive empiricism and use of traditional methodology. The problem of accuracy has been studied by several persons in relation to: (a) the characteristics of the perceiver; (b) characteristics of the perceived person or persons; (c) relationship between the perceiver and the perceived; (d) situational and contextual factors in interpersonal perception.<sup>4</sup>

During the late 1950s and 1960s, psychologists increasingly turned their attention away from the social determinants of perception to the exploration of the perception of the social. Cantril in his transactional approach to perception stressed the dimensions of uniqueness, creativity, and the dynamic reciprocity between the persons in interpersonal perception and appealed for understanding the difference between the meaning of the stimulus situation in object perception as compared to its meaning in interpersonal perception (1954).

Following the impact of Gestalt psychology during the second quarter of the twentieth century a very significant and distinctive line of research opened up (Arnheim, 1949; Kohler, 1929; Heider and Simmel, 1944), through the

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<sup>4</sup>Extensive discussions of these problems are given in McDavid and Harary (1968), and Shrauger and Altrocchi (1964) and Cline (1964).



studies of Asch on impression formation (1946, 1952). The Gestalt psychologists' proposition of the multileveled isomorphic process pointed toward the fact that a perceiver does not merely create meaning from fragments of inference, but rather (and more important) he receives meaning (Allport, 1961). Arnheim's work on the Gestalt theory of expression (1949) could be considered a definite landmark in the area of person perception.

Asch (1952) based his studies on person perception on the fundamental assumption that certain kinds of personal properties can be directly perceived. From the Gestalt point of view he argued that in the formation of a total impression, traits do not combine additively, but "dynamically" and that it involves such influences as mode and order of presentation, centrality-peripherality of traits and the interaction between a particular trait and other traits. Luchin's (1948) study came as a critique of Asch's work and suggested that studies of isolated traits could not be generalized to the process of perception of a real individual. However, Kelly (1955) in his study on first impression formation found that the results from using isolated traits and real people were very close.

Heider, also in the line of Gestalt psychology and Field theory, stressed that the 'phenomenal' unity based upon the compelling field qualities differ from units produced by causal integration; while the former is largely



a perceptual function, the latter involves the operation of cognitive factors (Heider and Simmel, 1944; Heider, 1958).

Werner, through his orthogenetic principle, has shown that the development of perception involves an increased differentiation and articulation of elements and, simultaneously, an increased interdependence of elements by virtue of their integration into hierarchically organized systems (Werner, 1957; Crockett, 1965). Werner distinguished between the global unity of the young child and the integrated unity of the adult, emphasizing the differential meaning of the statement that the 'organism reacts as a whole' at different levels of development (Gollin, 1960). Gollin's works on impression formation (1954) and analysis of the organizational characteristics of social judgment (1958) represent the first systematic approach to the development of person perception within the Wernerian framework. These studies opened up new directions for a series of developmental investigations in the areas of impression formation and person perception from the Clark University and other places in the United States.<sup>5</sup> (The present study also is closer to such trends than to any other mentioned earlier).

The studies under the impact of Werner also emphasized the structure of perception of other persons

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<sup>5</sup>Crockett (1965), has given an extensive survey of such studies.



(Crockett, 1965). The concept of structure in person perception has also been extensively studied by Scott and others (Scott, 1962, 1963; Todd and Rapaport, 1964). In recent years, the concept of cognitive complexity in interpersonal perception, mostly under the impact of the long-standing ideas of Werner (1957), Kelly (1953), Heider (1958), and Lewin (1936) has become extremely popular.<sup>6</sup> Another important line of studies dealing with the developmental aspect of cognitive complexity and emphasizing the dimensional rather than the categorical approach has come from Bieri and others (Bieri, 1961, 1966; Bieri, et al, 1966).

In the last ten years some important studies came from Estvan and Estvan (1959), Yarrow and Campbell (1963), Kohn and Fiedler (1961), Feshbach and Roe (1968) and Baldwin et al (1969). On the whole, however, the number of developmental studies on person perception has been very small in comparison to the increasing number of studies in relation to the other dimensions of the problem, probably owing to the predominantly cross-sectional orientation and molecular bias in large sections of the contemporary experimental psychology (Russel, 1957).

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<sup>6</sup>Extensive reviews of such studies have been given by Crockett (1965), Bonarius (1965).





#### IV. THE SPECIFIC PROBLEM TO BE INVESTIGATED

The present investigation seeks to study the nature of developmental changes that characterize both the content and structure of perception of persons of different age levels when they perceive other persons belonging either to the same or to different age levels.

The study is concerned with the following basic issues:

- (1) To examine some of the dimensions in terms of which the other person is perceived. (For example of dimension, see Appendix D, Section 1).
- (2) To specify the nature of some of the underlying processes or modes through which Ss of different age levels integrate these dimensions to form unified impressions or conceptualizations about the others. (For example of perceptual modes see Appendix D, Section 2).
- (3) To study the effect of the interaction of the respective ages of the perceiving persons (AOV) and of the observed persons (AEV) on the nature of differentiation and of modes of organization in person perception.



## V. THEORETICAL ASSUMPTIONS UNDERLYING THE PRESENT STUDY

### 1. Assumption regarding the basic nature of personality:

Since in any act of interpersonal perception or person perception, both the perceiver and the perceived belong to the same order of being, i.e. both are human beings, it is essential that any study in this area should start with an adequate conception of "person" or "personality"; and perceptual processes should be understood in relation to the context and state of the person (Kagan, 1967; Helson, 1964) obtaining as some species-specific characteristics. In the present context personality as an 'open system' seems to be the most appropriate one. An open-system is characterized by: (1) communication with the environment; (2) achievement and maintenance of steady state and the tendency to go beyond it; (3) generally an increase of order over time, owing to an increase in the complexity and differentiation of parts; and (4) extensive transactions with the social and cultural environment (Allport, 1960; Bertalanffy, 1952<sub>a</sub>, 1952<sub>b</sub>).

### 2. Assumption regarding the nature of development:

Because of the 'open system' characteristics of the personality interpersonal perceptual processes tend to change with the development taking place in the organism as a whole. The perceptual development, like the general process of



development, proceeds from relative globality and lack of differentiation to a state of increasing differentiation and hierarchic integration. Since development necessarily entails both continuity and discontinuity, in the case of person perception we may find that there is both quantitative as well as qualitative increase in the degree of differentiation and the transformation of perceptual modes. In other words, we expect that interpersonal sensitivity increases with age, enabling one to see 'more' in others, but not only more of the same things (quantitative) but more things and more about different things (qualitative). Hence, one may expect increase not only in the number of constructs and dimensions used but also an increase in the kind and variety of constructs used for the same and for the new dimensions that enter into and unfold gradually in the process of perception. Similarly, at higher levels there would be an increasing tendency to use more advanced modes of integration through subordination of parts or sub-wholes of traits or clusters, or configurations of traits and dispositions under higher order conceptualization about the other person's uniqueness, manifested as it is in diverse dispositions, actions and reactions. The discontinuity of development may be represented in the emergence of new forms and modes of integration leading to the formation of novel structures (Werner, 1957; Werner and Kaplan, 1963; Kaplan, 1967, 1969).



3. Assumption regarding the special meaning of perception in person perception:

Perception acquires a special meaning in the context of interpersonal perception, because unlike the perception of inanimate objects, here both the perceiver and the perceived person are dynamic human beings having the capacity for self-determination, representation, and influencing and controlling the behavior of the perceiver in a "mutually shared field" (Asch, 1952; Taguiri, 1958; Heider, 1958). Because of this special nature of the phenomenon, the usual procedures of the traditional psychology of sensation and perception to co-ordinate the phenomenal datum to the stimulus, defined in terms of physical variables, or to the pattern of sensory excitation on a single sensory receptor, are not adequate. Even the simplest form of person perception involves several sense modalities in complex interaction, causing constant exchange of categories derived from different sense modalities for describing the various forms and rhythms of experiences. Spontaneous descriptions of the perception of others show a plethora of metaphors for which it is difficult to single out a particular sense modality or a particular physical variable.

4. Assumption regarding the special meaning of stimulus object in person perception:

Since in a developmental approach the differentiation





between the higher and lower forms of activities are based upon both the qualitative and quantitative differences in the relationship between the organism and the environment, it is essential that relevant dimensions of the environment should be specified. Particularly in the context of person perception which is basically an instance of the perception of the social, it is important to recognize that the distal focus of the total perceptual process is the other person, who has not only a clearly differentiated position in the physical space, but an identifiable degree of self-containedness and self-determination and exists and functions quite independently of the perceiver, and can also affect and control the behavior of the perceiver in several ways merely by virtue of the common bond of humanness. Hence, any general developmental psychology of perceptual response to various objects and events of the world, such as we find in the works of Piaget and Bruner, may not be sufficient here. It is an obvious and empirically proved fact that human response to human beings, even among newborn infants under considerably reduced cues, is markedly different from the human response to static or mobile objects (Kagan, 1968; Goldstein, et al, 1966). Thus a developmental psychology of person perception cannot be based exclusively on the general increase in perceptual sensitivity over time or formation of structures ignoring the role of this very special kind of stimulus, i.e., the other person, which can force



itself upon the perceiver through several channels. Besides, 'person perception' or 'interpersonal perception' would be phrases without meaning if we focussed only on the general perceptual processes taking place in the perceiver irrespective of the referent, i.e., the other person.

5. Assumption regarding the content of person perception:

This brings us to another important but almost completely neglected aspect of the problem of person perception, that is of the content of person perception (McClelland, 1955; MacLeod, 1960; Wolin, 1956). While the concept of "structure" as the essence of perception has been studied by several persons, it has been overlooked that basically "structure" is a relational concept, and can obtain only in some "content". Perception is always 'of something', and perceptual structures cannot emerge in a vacuum, without objects or qualities and dimensions of experience to be related to each other. Person perception, like other forms of perception, cannot be defined irrespective of, or apart from, its particular content, because the content constitutes the perception itself. Ignoring the content, thus, would mean, ruling out the phenomenon of person perception itself. Besides, perception is basically a content oriented process rather than a process-oriented process; i.e., considered from the perceiver's side, we find that while perceiving the other person we are neither conscious of, nor concerned with, the 'how' or 'why' of the



perceptual processes taking place within us, but rather our whole consciousness is permeated, as it were, with the phenomenon of the other person. The other person is the center of total attention and concern, and here the perception is aimed at grasping the 'uniqueness' of the other, to get hold of the invisible core, the radix which holds together his totality, and which brings the 'unity in multiplicity'. On the contrary, if we focus on the processes taking place within ourselves, it becomes a form of self-perception rather than person or interpersonal perception.

In the context of our experiment we assumed on the basis of our everyday experience that each perceived person or each age group of the perceived persons represents a different content area. Persons belonging to different age groups not only vary in size, shape, the position they occupy in space while in static position or the domain that they cover through movement, but they vary in several other dimensions. Different age groups show different forms of unities and diversities, and also continuity and discontinuity and emergence of novel attributes and functions. Not only that, but in a given society there may be different words for describing the same kind of behavior occurring in different age groups. Thus, content may acquire different labels as well as meanings because of the contextual function of the age of the person.



6. Assumption regarding the "age" x "age" interaction:

The age role relations of the perceiving person and the perceived person may influence their mutual perception in several ways. One is more perceptive about one's own age group because peers are similar in many ways, e.g., in height, manner of dressing, the pattern of behavior that is expected from them, the wishes and the interests they share and the games they play; and all these bring about proximity between them. And because of proximity they have greater frequency of encounter and mutual exposure which may lead to greater amount of information about each other and possibly conceptualization of each other's behavior. The field of behavior, here, is characterized by less gradation, less constraints and contrasts. Relative commonness both in means and goals, etc., bring about much similarity that may increase empathic generalizations. Smaller gaps are more easily filled in (principle of closure) because of the greater acquaintance with the general pattern of the total field. Thus, among peers one may expect greater mutual perceptibility as well as perceptual sensitivity.

On the other hand, in the case of perception of others belonging to a lower age group, one may experience a little more facility than one may experience with regard to older age groups because of the fact that one has already gone through the stage and hence retains at least some degree of knowledge as to what it all could be. But at the same time,







we have to remember that though one once lived in that stage, now one has outlived it through his progression to a higher stage of development. Hence, he may be relatively quicker in his reaction, see more dimensions, but he has to be more reflective and retrospective in his conceptualization. There is also a marked increase in the amount of redundant information the child attends to, because need for information increases with the increase in the unfamiliarity and also with the increase in the distance between the ways of being of the perceiver and the perceived person (Gon, 1965). Hence, one may use several categories to describe another person who is younger in age, but in looking for relationships and interpretation of actions, one may use partial chaining and pseudo-explanatory concepts without subsuming them under some unified theme. Thus, he may see the surface but may have relatively less insight into the depth, and he may tend to displace the radix toward his own. Thus, in his interpretation he does not start from the child's point of view but from his own reconstruction of the child's activities, the base line does not lie in the sample of subjects but is drawn in continuation of one's own.

The same could be true with respect to perception of persons older than oneself but with certain significant differences. In comparison to the relative familiarity with the content of the earlier age level, one enters into a world of unfamiliarity, contrast, incomprehensible abruptness



and novelty. In the absence of information and experience to the contrary "insurgent information" as Navarra (1955) calls it, the child will assume more similarity than in fact exists. Two possibilities now open up for the child: either he merely registers what seems unfamiliar, as discrete and as yet unconnected information, or he feels challenged to render it more intelligible to himself. Increasing arousal of curiosity about this novel interpersonal world leads to guess-work (weighing in terms of chance probability) and to a considerable amount of uncertainty and unpredictability. There may not be much increase in the number of dimensions perceived, though there may be increasing articulation within each dimension, and this may be accompanied by considerable changes in the kinds of hypothetical relation between the different content components of person perception. The main contention is that the general principle of 'conservation' emphasized so much in the developmental studies of Piaget and his followers may not hold in the same way when we take into account the universal fact of over-all developmental changes in the object of perception in interpersonal or person perception.

7. Assumption regarding the role of social structure in person perception:

Finally the question of the role of the perceived person and that of the content and structure in person



perception brings us to the wider question of the social structure or social organization and its significance for a developmental psychology of person perception. It is an obvious fact that every perceiver and the perceived person is born into and is a part of a broader social structure characterized by multiple forms of socially defined role relations, and highly articulated systems of linguistic categories for describing the variously differentiated things and events in the given society. Since a person of any age is an inseparable part of a social organization, he is automatically subjected to the process of socialization obtaining in it. It is believed by sociologists and social psychologists that each phase of socialization is initiated by an increased differentiation of the social structure into which the child is socialized, and that there is an ordered sequence of social structures to be encountered during the process of socialization and a corresponding developmental sequence of needs and role concepts in the growing child (Emmerich, 1959; Parsons, 1955). Since the perceptual processes obtaining in any given interpersonal situation is inseparable from the over-all developmental changes in the person, in a given social organization, it is important to know the extent to which the age role concepts obtaining in the given society influence the structure and content of interpersonal perception.

However, by bringing in the fact of socialization, we



do not want to reduce the personality to a mere reactive system controlled and dominated by the situational contingencies and environmental forces, for we have to view the other as existing above and beyond the socially imposed class categories. As psychologists we are not interested in the social structure irrespective of the person reacting to it or acting within it. We are interested in the social structure and its content so long as we find them relevant for adequately describing and conceptualizing human behavior. We make attempts to understand the various dimensions of social structure not because that is our main object of concern, but because they constitute the referents of the perceptual behavior which we are trying to understand. We often enter into the realms of sociology, anthropology or ecology not because our goals are identical but because we are interested in abstracting out general principles in terms of which a person perceives another person. Person perception or interpersonal perception takes place wherever more than one person exists because of their inherent species-specific characteristics; and the process is bound to be affected by the local socio-cultural patterns, but there is always something in the process of such perception that remains invariant and unaffected by the social tags and that is the process of person perception itself. If this was not true, there would not have been anything like 'person perception' to concern so many social scientists all over the







world.

## VI. DEFINITIONS AND ABBREVIATIONS

AEV: Age as an ecological variable.

AOV: Age as an organismic variable.

Content: Refers to 'what' is perceived, i.e., the substance of perception consisting of the dimensions that characterize persons as perceived objects.

Differentiation: Refers to the number of dimensions or the content units contained in a description of person perception.

Dimensions: Any idea unit, or identifiable cluster of attributes and characteristics along which a person makes discriminations in describing other persons. A dimension may involve several sub-categories.

O. Group: Observed group as shown in the movie.

O. Group 1 or  $O_1$ : Observed group consisting of 5-6 year old girls.

O. Group 2 or  $O_2$ : Observed group consisting of 10-11 year old girls.

O. Group 3 or  $O_3$ : Observed group consisting of 15-16 year old girls.

P. Group: Perceiver group.

P. Group 1 or  $P_1$ : Perceiver group consisting of 5-6 year old girls.

P. Group 2 or  $P_2$ : Perceiver group consisting of 10-11 year old girls.

P. Group 3 or  $P_3$ : Perceiver group consisting of 15-16 year old girls.



P: Perceiving person.

PP: Person perception.

Perceptual Mode of Organization: Refers to the complexity of relationships among the content units or dimensions of the structure of person perception, i.e., relations of juxtaposition, aggregation, superordination-subordination, etc.

Structure: The form or the system of relationships among the components of the content of person perception, considered from the point of view of the whole or the sub-wholes rather than of any single part or element.

Sub-category: Refers to the levels or kinds within a given dimension.

Unit of Description: A unit refers to a discrete action or a single characteristic and evaluation.



## CHAPTER II

### METHODOLOGY

The present study, with its developmental orientation, is mainly interested in the effect of interaction of the ages of the perceiving and of the perceived persons on person perception. There were two major expectations behind the study and a number of hypotheses were generated from them:

(1) Perception of persons may vary as a function of certain perceiver differences (e.g., differences in the age of the perceivers) when certain characteristics of the object of perception are held constant (e.g., when the age of the observed persons is same for all the perceivers). Here, the factor of age is functioning as an organismic variable (AOV), and our focus is on the changes in person perception due to developmental processes taking place in the perceiving persons.

(2) Person perception may vary when certain perceiver characteristics are held constant (e.g., when all the perceivers in a given situation belong to the same age group) but certain characteristics of the observed persons are varied (e.g., observed persons are taken from different age groups). Here, the factor of age is operating as an ecological variable (AEV) and our focus is on the changes in person perception due to the physical and psychological dispositional properties of the perceived persons which may



lead to the classification of the Os as belonging to certain socially defined age groups, which in turn may function as contexts for such perceptions.

## I. HYPOTHESES

Such considerations lead to the formulation of the following specific hypotheses for empirical consideration in the present investigation.

Hypothesis 1: The degree of differentiation in person perception is a function of the age of the perceiver, i.e., the kinds and numbers of the dimensions, and the sub-categories within dimensions, used for describing others are positively related to the increase in the age of the perceivers.

Hypothesis 2: The degree of differentiation in person perception is a function of the age of the observed person, i.e., the kinds and numbers of the dimensions, and the sub-categories within dimensions, will vary with age variation in the observed persons.

Hypothesis 3: The degree of differentiation in person perception is a function of the interaction between the ages of the perceiving and the observed persons, i.e., differentiation will tend to increase with the decrease in the age distance between the





perceiving person and the observed persons.

Hypothesis 4: The pattern of modes of perceptual organization in person perception is a function of the age of the perceiver, i.e., the kinds and numbers of perceptual modes used for integrating the different dimensions and sub-categories will change with increase in the age of the perceiver; the use of higher order perceptual modes is positively related to the increase in the chronological age of the perceivers.

Hypothesis 5: The pattern of modes of perceptual organization is a function of the age of the observed person, i.e., the kinds and numbers of modes of perceptual organization will vary with the age variation in the observed persons.

Hypothesis 6: The pattern of modes of perceptual organization is a function of the age distance between the perceiving person and the observed person: the use of higher order perceptual modes will increase with the decrease in the age distance between the perceiving person and the perceived person.



## II. THE SAMPLE

The sample consisted of eighty-one girls drawn randomly from different nursery, elementary, and high schools located in the areas of the city of Edmonton, Alberta, Canada, described as being representative of low income families. Prior to the sample selection for the actual experiment, the school records of all the students belonging to the required age groups were studied. For experimental purposes four restrictions were placed on the sample selection.

(1) Only girls were selected as it was felt that most of the studies in this area have been confined to male subjects only.

(2) Because of the high degree of inter-cultural fusion and wide difference in native languages (i.e., a large number of children came from families who migrated to Canada from Germany, France, Czechoslovakia and other parts of Europe) only those children were selected whose school records and interview showed that they did not have any difficulty in understanding and expressing their ideas in English. This helped in eliminating the effect of incomplete and inadequate acquisition of the English language and some other linguistic problems that might have caused some variations both in the descriptions given by the subjects as well as in the coding of the descriptions by the experimenters.



(3) To guard against any possible effects of broken homes on patterns of person perception, the sample was confined only to children coming from "normal" families.

(4) I.Q.s obtained through Intelligence Tests already given by the schools ranged from 90 to 130 and the overall school records were satisfactory.

After controlling for these factors, subjects were chosen at random from the rest of the student population belonging to the required age groups. In the case of the high school students inclusion was made on the basis of voluntary consent of the students themselves. For the elementary and the nursery school children, after an initial interview with the teachers and students, original letters were sent to solicit the parents' support for the present research project (see Appendix A). In addition to this, in the case of the nursery school children, a joint meeting of the mothers, teachers and the experimenter was arranged to discuss some aspects of the research. Prior to the actual experiment, the experimenter visited the school three times and participated in all the activities with the teachers and students in order to become acquainted with the children. This was essential because of the ethnic differences between the experimenter and the subjects, which otherwise might have affected the subjects' participation in the experiment.



In the present experiment only three age groups were taken.

<u>Group</u>	<u>Age</u>	<u>No. of Subjects</u>
Group 1	5 - 6 years	27
Group 2	10 - 11 years	27
Group 3	15 - 16 years	<u>27</u>
	Total	81

These three particular age groups were chosen because previous research has shown that they correspond to the age levels when major changes occur in perception with respect to self and others (Piaget, 1926; Flavell, 1961).

The distinctive characteristics of these three age groups can be briefly summarized as follows:

Group 1: (5-6 years): Represents early childhood or pre-school stage, development of self identity through interaction within the relatively smaller circle of immediate family members or neighbours, but inability to take another person's role or perspective, relatively global characteristics of perception.

Group 2: (10-11 years): Corresponds to pre-adolescence and elementary school (grade 6), characterized by increasing socialization with the same sex members of the peer group, increasing tendency to form abstract concepts and growth of moral judgment and reasoning.

Group 3: (15-16 years): Corresponds to adolescence





(high school), characterized by heightened sensitivity to various aspects of the environment, more extensive interaction with different kinds of people in a complex world of multiple roles and perspectives, intensive use of observation, abstraction and hierarchical organization of perceptual information on a relatively higher level.

### III. THE INSTRUMENTS

For the purposes of the present study three different movies of approximately five minutes duration were made. Each movie involved a different age group of "actresses". The technical equipment required for videotape recording and play back were provided and operated by the staff at the Audio-Visual Media Department of the University of Alberta. The following equipment was used:

Television Camera -- General Electric Model #PC.14,

Videotape Recording -- Ampex Videotape Recorder,  
Model #VR 1500.

Monitor -- One 19" monitor for screening the movie  
in the experimental room.

Audio Recording of the Interviews -- Sound tapes were  
made of the interviews by Sony Tape  
Recorder Model T.C. 105 at a speed of  
1 7/8 IPS. Three such tape recorders  
were used.

#### The Movies

Each movie showed a sequence of interaction between two same aged girls, representing some common human themes



and situations such as helping, interruption, lying, problem solving and decision making. The two girls were shown as having certain similar and dissimilar qualities, with different degrees of consistency in their actions and interactions.

The main theme of the movie was as follows, with slight variations in activities and objects as seemed appropriate to different age groups. All the movies were video-taped.

#### The Movie (for the 5-6 year old Ss).

A small kindergarten class room situation with a few chairs and tables and a few racks containing books and other necessary material. Two girls, named Mary and Jane by the E, enter into the room and move towards one of the racks. Mary tries to take a number of painting books and a box of crayons. The crayon box slips down from her hands as Jane moves forward to take some books from the same place. Crayons are scattered all around and Mary, with her painting books, cannot bend down and pick them up; she looks quite helpless. Jane comes to her and picks up the scattered crayons and gives them to Mary. Jane seems to be very active and she does the whole thing quite quickly. Mary smiles at Jane as if saying "Thank you".

Then they move toward the table and sit down side by side. Mary starts painting and gets quite involved in that. Jane starts reading a book but does not seem to concentrate. She looks here and there and sometimes picks up Mary's crayons, moves the table, keeps her hand on the picture Mary is drawing, i.e., trying to interfere and disturb Mary. Mary asks Jane not to disturb her (through gestures), then she hits Jane mildly. Jane hits her back very aggressively.

Mary goes toward the rack to get some more crayons and a ruler. Jane gets up quickly, looks at the door and at Mary, and spoils the whole picture by crossing it with different crayons, and sits down, quietly pretending to read. Mary comes back, is shocked to see her picture spoiled and looks at Jane as if trying to guess if she had done it.



Jane nods her head vigorously as if saying she did not do it. She also points toward the door and says that some other girl came and did that when Mary was not there. Mary looks quite angry. They are shown to be in some kind of verbal fight for some time. Then Mary sits down looking at the picture. Her face looks very sad. She bends down her head on the picture and her face is not visible any more.

Jane leaves her chair and moves toward the other corner of the room. She tries to build up a house with small blocks. She tries several ways, putting the blocks in different ways. She is shown as if she were not sure as to what she wanted to do. Sometimes she pauses and thinks and then starts again. Suddenly she gets impatient and throws away the blocks. Mary gets up and moves slowly toward Jane. Mary picks up one design from the box and gives it to Jane, as if saying "Here is a design, why don't you try it?" Jane pushes her away. Mary goes back to her place. Jane tries that design and finishes the house quite quickly. She looks very happy and excited about her achievement, as if saying "Aha! I have done it". Mary comes forward, looks at the house, and they smile at each other.

#### IV. THE METHOD

(1) Experimental Design: Since we were interested in the 'AEV x AOV' interaction, it was essential that each P. Group sees each O. Group. We had three groups of perceivers representing the three different age levels. The difficulties encountered in having reciprocal interpersonal units of perceiving persons for the experiment in the laboratory situation were greatly reduced by making three different movies enacted by children belonging to the same age group as the perceivers. These movies showed the observed persons and helped in maintaining the necessary constancy of the stimulus situation in different experimental sessions.

Since we had three groups of perceivers and also three





different movies representing each of these age groups, and since we wanted each age group to see persons belonging to the same age group as well as a younger and an older age group, we had  $3 \times 3 = 9$  treatment conditions. Since age, as an organismic variable, cannot be randomly assigned to the perceivers participating in the experimental situation, we randomly assigned the perceivers to different O. Groups represented through the movies. Each P. Group was divided into three sub-groups giving a total number of nine groups. Each of these groups was assigned nine subjects making a total number of  $9 \times 9 = 81$  observations. This assignment of subjects to the nine different treatment conditions was made with the help of the Table of Random Numbers. Thus when treatments were randomly assigned to the subjects, or when subjects were randomly assigned to the treatment conditions, we anticipated that this process of randomization would randomize individual differences between the treatment groups. The experimental design was thus a form of  $3 \times 3$  randomized block design, and it helped in eliminating residual effects that might have resulted if the same P had seen all three movies. Thus, it could be anticipated that each group of subjects would be relatively more homogeneous on the dependent variable (perception measured in terms of differentiation and modes of integration) in the absence of treatment effects than Ps selected completely at random.





TABLE I  
EXPERIMENTAL TREATMENT CONDITIONS AND THE  
DISTRIBUTION OF SUBJECTS

P. Groups	O. Groups			
	O. Group 1 (5-6 years)	O. Group 2 (10-11 years)	O. Group 3 (15-16 years)	Total
P. Group 1 (5-6 years)	P. Group 1 O. Group 1 n = 9	P. Group 1 O. Group 2 n = 9	P. Group 1 O. Group 3 n = 9	27
P. Group 2 (10-11 years)	P. Group 2 O. Group 1 n = 9	P. Group 2 O. Group 2 n = 9	P. Group 2 O. Group 3 n = 9	27
P. Group 3 (15-16 years)	P. Group 3 O. Group 1 n = 9	P. Group 3 O. Group 2 n = 9	P. Group 3 O. Group 3 n = 9	27
Total	27	27	27	81

(2) Training the Experimenters. It was decided to have three Ss instead of only one for each experimental session. It was felt that if the children came in with their own age group, and from the same school, this would considerably reduce the strangeness of the whole experimental situation. However, the need for individual attention required for intensive observation of each S throughout the experimental session was met through having individual experimenters for each S.

All the experimenters were graduate and under-graduate students registered in Educational Psychology courses who volunteered to participate in the research project. All of



these students had considerable experience with the age groups they chose to work with. In a number of joint sessions the purpose and the procedure of the present study was intensively discussed. Each experimenter was given typed instructions regarding their role in the experiment (see Appendix B). They were also asked to give their suggestions regarding the adequate formulation of the questions on the basis of their preliminary interview with the same age group.

(3) Experimental Set-up and Procedure. The 19" Monitor of an Ampex Videotape recorder, Model #VR 1500 was placed in an appropriate angle in the experimental room while the recorder was placed in a small adjoining room with the technical staff for the screening of the movie on the Monitor. Six chairs were placed in two close rows; the Ss sat in the front row while the experimenters sat in the back row, slightly on the left side of the Ss, so that each E could observe the behavior of her S during the movie. Care was taken that the whole situation did not take on too formal a 'laboratory look' and so it was more like watching a 'T.V. show' with friends. Three small cubicles near the experimental room were used for the purpose of interviewing. All these rooms were well provided with all the technical equipment for uninterrupted recording of the interviews.

(a) First step. According to the pre-arranged



order, small groups of three Ss belonging to the same age group and the same school were brought to the laboratory. After an informal meeting of the Ss and the Es at the lounge, they all went to the main experimental room for the 'T.V. show'. After everybody had settled down, E<sub>1</sub> got up and gave the first set of instructions for orienting the Ss to the experimental situation (see Appendix C, Section 1a). The second set of instructions (see Appendix C, Section 1b) was given just before the movie was started on the T.V. Each time, profiles of the observed persons were shown twice separately and their pseudo-names on the movie were specified.

In the case of the nursery school children, E<sub>1</sub> gave a narration during the movie (see Appendix C, Section 1d). The narration was very carefully worded eliminating any kind of bias or suggestion in the total sentence structures or in the intonation pattern.

(b) Second step. Immediately after the movie, each of the Ss was taken to a separate cubicle by the respective Es. In the Interview session, first of all some major portions of the instructions given earlier, were repeated again (see Appendix C, Section 2a). Then the S was given the opportunity for spontaneous description of her impressions about the Os in the movie. When the S stopped or could not go further, E slowly proceeded with the pre-formulated list of questions (see Appendix C,



Section 2b). However, since the questions were meant to seek information about certain dimensions of personality, questions related to those dimensions were eliminated whenever it was felt that the S had already given sufficient information in the spontaneous description. Es were, however, asked to be careful not to miss any relevant information.

## V. ANALYSIS OF RESULTS

### 1. Rationale for the Selection of Dimensions and Sub-categories and the Modes of Perceptual Organization:

Since it was assumed that each age group of observed persons represents a different content area, and that the perceptual modes of integrating the knowledge about other persons undergo transformation with organismic development, it would have been both difficult as well as illogical to start with a predetermined set of content dimensions or sub-categories. Therefore, it was decided to adopt both an inductive and a deductive approach in the analysis of our data. The lack of systematic study of the use of dimensions for describing person perception within the age range included in the present study, made it essential to start directly from the phenomenon itself. An attempt was made to induce and generate the dimensions from the descriptions given by the Ss. Two judges went through one third of the protocols (chosen randomly from the total of eighty-one





protocols) independently and tried to delineate a comprehensible set of dimensions of personality and interpersonal relations that were used most often by most of the subjects. An attempt was also made to keep these dimensions more on a descriptive level avoiding as far as possible adultocentric abstract conceptualizations. It was felt that by including a number of sub-categories within each of the dimensions we could preserve more of the qualitative richness of the experiences, which otherwise might have been lost through rubrication within a strictly defined category.

The phenomenologically derived dimensions and sub-categories were then compared with the traits and dispositions in terms of which personality has been described in the history of psychology (Allport, 1937), and in some well recognized studies of personality. As we were primarily interested in an interpersonal approach to person perception, we sought the theoretical validation of our dimensions mainly from the works of Murray (1938) and Heider (1958). Some more recent studies following Murray's theoretical formulations such as the Adjective Check List (Gough and Heilburn, 1965) and Personality Research Form or PRF (Jackson, 1965) provided considerable amount of information for checking the reliability and validity of the dimensions. Another major source of clarification and reformulation of the dimensions was the Coding Manual devised by Richardson et al (1964), and made available by



the Library of Congress to the investigator. In case of younger age groups the studies by Shirley (1939), Watts (1944), Yarrow and Campbell (1963), Hastorf et al (1958, 1964) and Freedman et al (1951) were of considerable help. A number of studies giving the word lists used by pre-school and elementary-school Canadian children (Stothers 1947) helped in understanding the vocabulary, and the syntactic structure of the language of these children.

The same inductive-cum-deductive approach was followed with regard to the selection and formulation of the modes of perceptual organization. On the deductive side, however, the basic theoretical framework was derived mainly from the orthogenetic principle of Heinz Werner (1957), from studies of the modes of conflict resolution by Kaplan and Crockett (1967), from Gollin's (1952, 1958) analysis of levels of organization used, and from a number of recent studies in the Heinz Werner tradition at Clark University. For the purpose of the present study seven different modes of perceptual organization were adopted (see Appendix D, Section 2).

## 2. Statistical Analysis:

(a) Reliability Checks. For the reliability analysis one third of the protocols from each treatment condition were selected at random. These protocols were then coded independently by two judges. Pearson's product moment



coefficient of correlation was used for seeing the degree of association between the two independent sets of codings.

(b) Analysis of the Dependent Variable. As stated earlier, the person perception was analysed in terms of differentiation and modes of organization. The number of dimensions and the sub-categories within different dimensions were taken as the measures of differentiation. Any reference to any particular observable or inferred property of the O was taken as a unit of description (for details see the Coding Manual, Appendix D). The units of description were assigned to different dimensions and the sub-categories. The number of the units were summed across rows and down the columns, where the rows represented the different levels of the independent variable. The row, column and the cell sums were converted into proportions of the overall total, which among other things helped in correcting for differences in 'wordiness' or total number of units as function of AOV, AEV and AOV x AEV effects. The proportion of total responses in each column provided an index of the relative weights of the dimension or the relative weights of the sub-categories and levels within each dimension. The proportions of total responses in each row gave the relative response productivity of age as an organismic variable and age as an ecological variable as well as the interaction of the two. Five sets of Chi square analyses were done to see the relationship between



the variables: (i) Between P. Groups, (ii) Between O. Groups, (iii) P. Group 1's perception of different O. Groups, (iv) P. Group 2's perception of different O. Groups and (v) P. Group 3's perception of different O. Groups. The data were first analysed in terms of the number of dimensions and then in terms of the number and kinds of sub-categories within each of the dimension (see Appendix E).

A similar statistical approach was followed for the analysis of the perceptual modes of organization. The distribution of the modes were shown through Histograms (for the description of the perceptual modes see Appendix D).





## CHAPTER III

### RESULTS

The data obtained through the experimental procedure outlined in the previous chapter were analyzed to see whether they supported our theoretical assumptions and hypotheses. As indicated earlier, perception was analyzed in terms of two characteristic processes, namely differentiation and modes of perceptual organization.

The data presented in Table II gives us an overall picture of the nature of differentiation in person perception.

In view of the large number of dimensions and the wide distribution of responses along these, it was arbitrarily decided that out of the total number of twenty-six dimensions, to start with, only those would be considered which were used at least 3 per cent of the time (Tables III, IV and V). Our purpose was to eliminate differences that were functions of only one or two cases. This also made it possible to start with a manageable size of dimensions whose inclusion was completely independent of any theoretical bias. Later on, an intensive analysis of all the dimensions in terms of the interaction effects of age as an organismic variable and age as an ecological variable gave us a chance to see the differential role of the most frequently and the least frequently used dimensions in the formation of person concepts (Tables II, III, IV, V, and all the tables in



TABLE II  
CONTENT DIMENSIONS IN PERSON PERCEPTION RELATED TO THE AGE VARIATION  
BETWEEN PERCEIVING AND OBSERVED PERSONS

No. Dimensions	P. Group 1			P. Group 2			P. Group 3		
	O Grp. 1	O Grp. 2	O Grp. 3	O Grp. 1	O Grp. 2	O Grp. 3	O Grp. 1	O Grp. 2	O Grp. 3
1. Clothing	24 (06.5)	4 (01.6)	7 (02.4)	0 (00.0)	1 (00.1)	2 (00.3)	0 (00.0)	7 (00.5)	8 (00.4)
2. Physical Appearance	50 (13.5)	32 (12.7)	30 (10.5)	14 (01.7)	11 (01.2)	16 (02.1)	14 (00.9)	21 (01.6)	5 (00.3)
3. Activities	63 (17.0)	62 (24.6)	49 (17.1)	145 (18.0)	172 (18.9)	154 (19.8)	210 (13.4)	156 (12.1)	160 (08.6)
4. Age	3 (00.8)	3 (01.2)	5 (01.7)	32 (04.0)	6 (00.7)	6 (00.8)	75 (04.8)	60 (04.6)	16 (00.9)
5. Sex	0 (00.0)	0 (00.0)	8 (02.8)	0 (00.0)	0 (00.0)	0 (00.0)	3 (00.2)	3 (00.2)	12 (00.6)
6. Total Personality	16 (04.3)	12 (04.8)	11 (03.8)	29 (03.6)	30 (03.3)	25 (03.2)	35 (02.2)	41 (03.2)	42 (02.3)
7. Abilities and Powers	31 (08.4)	15 (06.0)	21 (07.3)	71 (08.8)	54 (05.9)	36 (04.6)	30 (01.9)	35 (02.7)	96 (05.2)
8. Intentions and Orientations	14 (03.8)	1 (00.4)	4 (01.4)	67 (08.3)	87 (09.5)	66 (08.5)	161 (10.3)	125 (09.7)	232 (12.5)
9. Feelings - Moods	1 (00.3)	4 (01.6)	3 (01.0)	10 (01.2)	31 (03.4)	18 (02.3)	107 (06.8)	47 (03.6)	38 (02.1)
10. Emotional Adjustment	0 (00.0)	0 (00.0)	0 (00.0)	21 (02.6)	2 (00.2)	13 (01.7)	33 (02.1)	52 (04.0)	84 (04.5)
11. Wishes and Values	19 (05.1)	15 (06.0)	10 (03.5)	24 (03.0)	36 (04.0)	16 (02.1)	54 (03.4)	49 (03.8)	178 (09.6)



TABLE II (CONTINUED)

No.	Dimensions	P. Group 1			P. Group 2			P. Group 3		
		O Grp. 1	O Grp. 2	O Grp. 3	O Grp. 1	O Grp. 2	O Grp. 3	O Grp. 1	O Grp. 2	O Grp. 3
12.	Interests and Hobbies	16 (04.3)	8 (03.2)	11 (03.8)	26 (03.2)	35 (03.8)	21 (02.7)	36 (02.3)	26 (02.0)	51 (02.8)
13.	Self Concept	0 (00.0)	0 (00.0)	0 (00.0)	9 (01.1)	6 (00.7)	5 (00.6)	16 (01.0)	13 (01.0)	39 (02.1)
14.	Interpersonal Sensitivity	2 (00.5)	0 (00.0)	2 (00.7)	6 (00.7)	15 (01.6)	7 (00.9)	9 (00.6)	19 (01.5)	32 (01.7)
15.	Intrapersonal Consistency	7 (01.9)	0 (00.0)	2 (00.7)	22 (02.7)	17 (01.9)	16 (02.1)	50 (03.2)	63 (04.9)	77 (04.2)
16.	Change of Total Personality	1 (00.3)	0 (00.0)	0 (00.0)	6 (00.7)	2 (00.2)	0 (00.0)	22 (01.4)	22 (01.7)	8 (00.4)
17.	Relationships*	14 (03.8)	11 (04.4)	6 (02.1)	21 (02.6)	23 (02.5)	15 (01.9)	25 (01.6)	21 (01.6)	30 (01.6)
18.	Independence-Dependence	8 (02.2)	6 (02.4)	7 (02.4)	26 (03.2)	27 (03.0)	30 (03.9)	79 (05.0)	86 (06.7)	49 (02.6)
19.	Affiliation-Non-Affiliation	29 (07.8)	38 (15.1)	20 (07.0)	76 (09.5)	88 (09.7)	86 (11.1)	164 (10.5)	133 (10.3)	187 (10.1)
20.	Nurturance-Non-Nurturance	39 (10.5)	21 (08.3)	48 (16.8)	105 (13.1)	165 (18.1)	143 (18.4)	165 (10.5)	144 (11.1)	224 (12.1)
21.	Dominance-Submission	0 (00.0)	0 (00.0)	0 (00.0)	18 (02.2)	11 (01.2)	21 (02.7)	85 (05.4)	30 (02.3)	69 (03.7)
22.	Interpersonal Consistency	15 (04.0)	5 (02.0)	9 (03.1)	24 (03.0)	23 (02.5)	16 (02.1)	31 (02.0)	41 (03.2)	56 (03.0)
23.	Exhibition-Seclusion	0 (00.0)	0 (00.0)	0 (00.0)	0 (00.0)	1 (00.1)	9 (01.2)	64 (04.1)	28 (02.2)	60 (03.2)



TABLE II (CONTINUED)

No.	Dimensions	P. Group 1			P. Group 2			P. Group 3		
		O Grp. 1	O Grp. 2	O Grp. 3	O Grp. 1	O Grp. 2	O Grp. 3	O Grp. 1	O Grp. 2	O Grp. 3
24.	Environmental-Situational **	0 (00.0)	3 (01.2)	2 (00.7)	0 (00.0)	1 (00.1)	3 (00.4)	12 (00.8)	2 (00.2)	6 (00.3)
25.	Environmental-Interpersonal	0 (00.0)	2 (00.8)	0 (00.0)	15 (01.9)	29 (03.2)	7 (00.9)	55 (03.5)	33 (02.6)	19 (01.0)
26.	Norms	19 (05.1)	10 (04.0)	31 (10.8)	37 (04.6)	38 (04.2)	47 (06.0)	34 (02.2)	35 (02.7)	73 (03.9)

<sup>1</sup> Difference between P. Groups (i.e. AOV) is significant at <.001 level.

<sup>2</sup> Difference in perception of different O. Groups (i.e. AEV) is significant at <.001 level.

<sup>3</sup> Differences within different P. Groups (i.e., AOV x AEV) are significant at <.001 level.

\* Dimension 17 (Relationships) was excluded from Appendix E because of the insuperable difficulties in fitting it into the same computer programming as rest of the items.

\*\* Dimension 24 (Environmental-Situational) was excluded as the frequency of its usage fell below the three per cent cut-off level, under all experimental conditions.







TABLE III

PERCEIVER GROUP 1 (5-6 YEARS): USE OF DIMENSIONS IN DESCRIBING DIFFERENT AGE GROUPS  
(At the three per cent cut-off level)

Dimensions used for all the O. Groups. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 1. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 2. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 3. (Ranked in Terms of Relative Proportions)
3. Activities...19.1	3. Activities...17.0	3. Activities...24.6	3. Activities...17.1
2. Phys. Appearance...12.3	2. Phys. Appearance...13.5	19. Affiliation-Non-Affiliation...15.1	20. Nurture Non-Nurture...16.8
20. Nurture-Non-Nurture...11.9	20. Nurture-Non-Nurture...10.5	2. Phys. Appearance...12.7	26. Norms...10.8
19. Affiliation-Non-Affiliation...09.6	7. Abilities...08.4	20. Nurture-Non-Nurture...08.3	2. Phys. Appearance...10.5
7. Abilities and Powers...07.4	19. Affiliation-Non-Affiliation...07.8	7. Abilities and Powers...06.0	7. Abilities and Powers...07.3
26. Norms...06.6	1. Clothing...06.5	11. Wishes and Values...06.0	19. Affiliation-Non-Affiliation...07.0
11. Wishes and Values...04.8	11. Wishes and Values...05.1	6. Total Personality...04.8	12. Interests and Hobbies...03.8
6. Total Personality...04.3	26. Norms...05.1	17. Relationship...04.4	6. Total Personality...03.8
1. Clothing...03.9	6. Total Personality...04.3	26. Norms...04.0	11. Wishes and Values...03.5
12. Interests and Hobbies...03.9	12. Interests and Hobbies...04.3	12. Interests and Hobbies...03.2	22. Interpersonal Consistency...03.1
17. Relationship...03.4	22. Interpersonal Consistency...04.0	--	--
22. Interpersonal Consistency...03.2	17. Relationship...03.8	--	--
--	8. Intentions and Orientations...03.8		



TABLE IV

PERCEIVER GROUP 2 (10-11 YEARS): USE OF DIMENSIONS IN DESCRIBING DIFFERENT AGE GROUPS  
(At the three per cent cut-off level)

Dimensions used for all the O. Groups. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 1. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 2. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 3. (Ranked in Terms of Relative Proportions)
3. Activities...18.9	3. Activities...18.0	3. Activities...18.9	3. Activities...19.8
20. Nurturance-Non-Nurturance...16.6	20. Nurturance-Non-Nurturance...13.1	20. Nurturance-Non-Nurturance...18.1	20. Nurturance-Non-Nurturance...18.4
19. Affiliation-Non-Affiliation...10.0	19. Affiliation-Non-Affiliation...09.5	19. Affiliation-Non-Affiliation...09.7	19. Affiliation-Non-Affiliation...11.1
8. Intentions and Orientations...08.9	7. Abilities and Powers...08.8	8. Intentions and Orientations...09.5	8. Intentions and Orientations...08.5
7. Abilities and Powers...06.5	8. Intentions and Orientations...08.3	7. Abilities and Powers...05.9	26. Norms...06.0
26. Norms...04.9	26. Norms...04.6	26. Norms...04.2	7. Abilities and Powers...04.6
6. Total Personality...03.4	4. Age...04.0	11. Wishes and Values...04.0	18. Independence-Dependence...03.9
12. Interests and Hobbies...03.3	6. Total Personality...03.6	12. Interests and Hobbies...03.8	6. Total Personality...03.2
18. Independence-Dependence...03.3	12. Interests and Hobbies...03.2	9. Feelings and Moods...03.4	--
11. Wishes and Values...03.0	18. Independence-Dependence...03.2	6. Total Personality...03.3	--
--	11. Wishes and Values...03.0	25. Environment: Interpersonal...03.2	--
--	22. Interpersonal Consistency...03.0	18. Independence-Dependence...03.0	--



TABLE V

PERCEIVER GROUP 3 (15-16 YEARS): USE OF DIMENSIONS IN DESCRIBING DIFFERENT AGE GROUPS  
(At the three per cent cut-off level)

Dimensions used for all the O. Groups. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 1. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 2. (Ranked in Terms of Relative Proportions)	Dimensions used for O. Group 3. (Ranked in Terms of Relative Proportions)
20. Nurturance-Non-Nurturance...11.3	3. Activities...13.4	3. Activities...12.1	8. Intentions and Orientations...12.5
3. Activities...11.2	19. Affiliation-Non-Affiliation...10.5	20. Nurturance-Non-Nurturance...11.1	20. Nurturance-Non-Nurturance...12.1
8. Intentions and Orientations...11.0	20. Nurturance-Non-Nurturance...10.5	19. Affiliation-Non-Affiliation...10.3	19. Affiliation-Non-Affiliation...10.1
19. Affiliation-Non-Affiliation...10.3	8. Intentions and Orientations...10.3	8. Intentions and Orientations...09.7	11. Wishes and Values...09.6
11. Wishes and Values...06.0	9. Feelings and Moods...06.8	18. Independence-Dependence...06.7	3. Activities...08.5
18. Independence-Dependence...04.5	21. Dominance-Submission...05.4	15. Intra-personal Consistency...04.9	7. Abilities and Powers...05.2
9. Feelings and Moods...04.1	18. Independence-Dependence...05.0	4. Age...04.6	10. Emotional Adjustment...04.5
15. Intra-personal Consistency...04.0	4. Age...04.8	10. Emotional Adjustment...04.0	15. Intrapersonal Consistency...04.2
21. Dominance-Submission...03.9	23. Exhibition-Seclusion...04.5	11. Wishes and Values...03.8	26. Norms...03.9
10. Emotional Adjustment...03.6	25. Environment: Interpersonal...03.5	9. Feelings and Moods...03.6	21. Dominance-Submission...03.7
7. Abilities and Powers...03.4	11. Wishes and Values...03.4	6. Total Personality...03.2	23. Exhibition-Seclusion...03.2
23. Exhibition-Seclusion...03.2	15. Intra-personal Consistency...03.2	22. Interpersonal Consistency...03.2	22. Interpersonal Consistency...03.0
4. Age...03.2	--	--	--
26. Norms...03.0	--	--	--





Appendix E).

Hypothesis 1: The degree of differentiation in person perception is a function of the age of the perceiver, i.e., the kinds and numbers of the dimensions, and the sub-categories within dimensions, used for describing others are positively related to the increase in the age of the perceivers.

The results show that almost all the dimensions were used by the perceivers, there were, however very significant differences in the frequency with which different dimensions were used by the different age groups of the perceivers (see Tables II, III, IV and V).

The developmental transformations in the content of person perception was more clearly manifested in the differential usage of the different levels or sub-categories within the dimensions used. This was evidenced by the highly significant differences in the frequencies and relative proportion with which different levels or sub-categories were used by different age groups of perceivers. In the between P. Group analysis, significant chi-squares were found in relation to the following dimensions (see Appendix E): Clothing (Table 1.1); Physical Appearance (Table 2.1); Activities (Table 3.1); Age (Table 4.1); Total Personality (Table 6.1); Ability and Power (Table 7.1); Intentions and Orientations (Table 8.1); Feelings and Moods (Table 9.1);





Emotional Adjustment (Table 10.1); Self-concept (Table 13.1); Interpersonal Sensitivity (Table 14.1); Independence-Dependence (Table 17.1); Affiliation-Non-affiliation (Table 18.1); Consistency in Interpersonal Behavior (Table 21.1); Environment: Interpersonal (Table 23.1); and Norms (Table 24.1).

Results also seem to indicate that there is increase both in the number as well as frequency of usage of the different levels or sub-categories of certain clusters of dimensions with increase in the age of the perceiving persons. However, when we analyzed the data of each P. Group separately we found that in most cases there were no significant differences in the use of sub-categories in P. Group 1 (5-6 years). Significant differences were found only in case of Clothing (Tables 1.1 and 1.3), Affiliation-Non-affiliation (Tables 18.1 and 18.3) and Norms (Tables 24.1 and 24.3).

In the case of the P. Group 2 (10-11 years) we found more varied use of sub-categories within a relatively greater number of dimensions, i.e. Intentions and Orientations (Tables 8.1 and 8.4), Feelings and Moods (Tables 9.1 and 9.4), Intrapersonal Consistency (Tables 15.1 and 15.4), Consistency in Interpersonal Behavior (Tables 21.1 and 21.4) and Environment: Interpersonal (Tables 23.1 and 23.4).

The Ss in the P. Group 3 (15-16 years) not only used almost all the sub-categories within all the dimensions, but



they also showed a high degree of differentiation within the sub-categories. They also differed significantly from P. Group 1 (5-6 years) and P. Group 2 (10-11 years) in the use of levels and sub-categories, especially within the following dimensions: Age (Tables 4.1 and 4.5), Sex (Tables 5.1 and 5.5), Total Personality (Tables 6.1 and 6.5), Emotional Adjustment (Tables 10.1 and 10.5), Wishes and Values (Tables 11.1 and 11.5), Self-concept (Tables 13.1 and 13.5), Intrapersonal Consistency (Tables 15.1 and 15.5), Consistency in Interpersonal Behavior (Tables 21.1 and 21.5), Exhibition-Seclusion (Tables 22.1 and 22.5), and Norms (Tables 24.1 and 24.5).

Hypothesis 2: The degree of differentiation in person perception is a function of the age of the observed person, i.e., the kinds and numbers of the dimensions, and the sub-categories within dimensions, will vary with age variation in the observed persons.

The results confirm the expectation that degree of differentiation may vary as a function of the age of the perceived person. There was a highly significant difference ( $p < .001$ ) in the use of dimensions for the different O. Groups (see Tables II, III, IV, and V). There were also significant differences in the use of sub-categories within dimensions of Clothing (Table 1.2), Age (Table 4.2), Sex (Table 5.2), Total Personality (Table 6.2), Intentions and



Orientations (Table 8.2), Feelings and Moods (Table 9.2), Emotional Adjustment (Table 10.2), Wishes and Values (Table 11.2), Self-concept (Table 13.2), Interpersonal Sensitivity (Table 14.2), Intrapersonal Consistency (Table 15.2), Consistency in Interpersonal Behavior (Table 21.2), and Norms (Table 24.1).

Hypothesis 3: The degree of differentiation in person perception is a function of the interaction between the ages of the perceiving and the observed persons, i.e., differentiation will tend to increase with the decrease in the age distance between the perceiving person and the observed persons.

Although a comparative analysis shows that the sub-categories used for describing O. Groups differ very significantly within and between the different P. Groups (see the tables in Appendix E), nevertheless, when we consider how a person of a given age group is perceived by a person who is either of his own age or younger or older, then we find that it is not the single factor of chronological age per se which seems to trigger off the generation of dimensions and sub-categories but the process of interaction between the age of the perceiver and the age of the perceived person.

We found that as the age distance decreases there is increase both in the number of dimensions and sub-categories



(see Tables II, III, IV, and V, and all the tables in Appendix E) with more concentration on inferred qualities and attributes. This "AOV x AEV" interaction effect becomes increasingly evident with the increase in the age of the perceiver. Results show that there is no significant difference in the P. Group 1's use of dimensions and sub-categories for different O. Groups (Tables I and III under all the analyses for the Dimensions, Appendix E). Significant differences were found in only three dimensions: Clothing (Table 1.3), Affiliation-Non-affiliation (Table 18.2), and Norms (Table 24.3), while in P. Group 2's perception of different O. Groups 1, 2, 3, significant differences were found in the dimensions of Age (Table 4.4), Feelings and Moods (Table 9.4), Interpersonal Consistency (Table 15.4), Consistency in Interpersonal Behavior (Table 21.4) and Interpersonal Environment (Table 24.4).

P. Group 3 also showed highly significant differences in the use of dimensions and sub-categories for describing different O. Groups. The analyses show a high degree of differentiation within the sub-categories of the following dimensions: Age (Table 4.5), Sex (Table 5.5), Total Personality (Table 6.5), Emotional Adjustment (Table 10.5), Wishes and Values (Table 11.5), Self-concept (Table 13.5), Intrapersonal Consistency (Table 15.5), Consistency in Interpersonal Behavior (Table 21.5), Exhibition-Seclusion (Table 22.5) and Norms (Table 24.5).





Hypothesis 4: The pattern of modes of perceptual organization in person perception is a function of the age of the perceiver, i.e., the kinds and numbers of perceptual modes used for integrating the different dimensions and sub-categories will change with increase in the age of the perceiver: the use of higher order perceptual modes is positively related to the increase in the chronological age of the perceivers.

Results show that all the modes of organization were used by all the Ss irrespective of the differences in their chronological ages. However, there were significant differences in the frequency with which different perceptual modes were used by the different P. Groups ( $\chi^2 = 559.22461$ ;  $p < .001$ ;  $df = 12$ ). The differential patterns of modes showing increasing use of higher order modes with the increase in the age of the perceiver are clearly evidenced in Figures 1, 3, 4, and 5. (For abbreviations see Appendix F, pp. 119-121).

Hypothesis 5: The pattern of modes of perceptual organization is a function of the age of the observed person, i.e., the kinds and numbers of modes of perceptual organization will vary with the age variation in the observed persons.

The data supported our hypothesis ( $\chi^2 = 188.80640$ ;



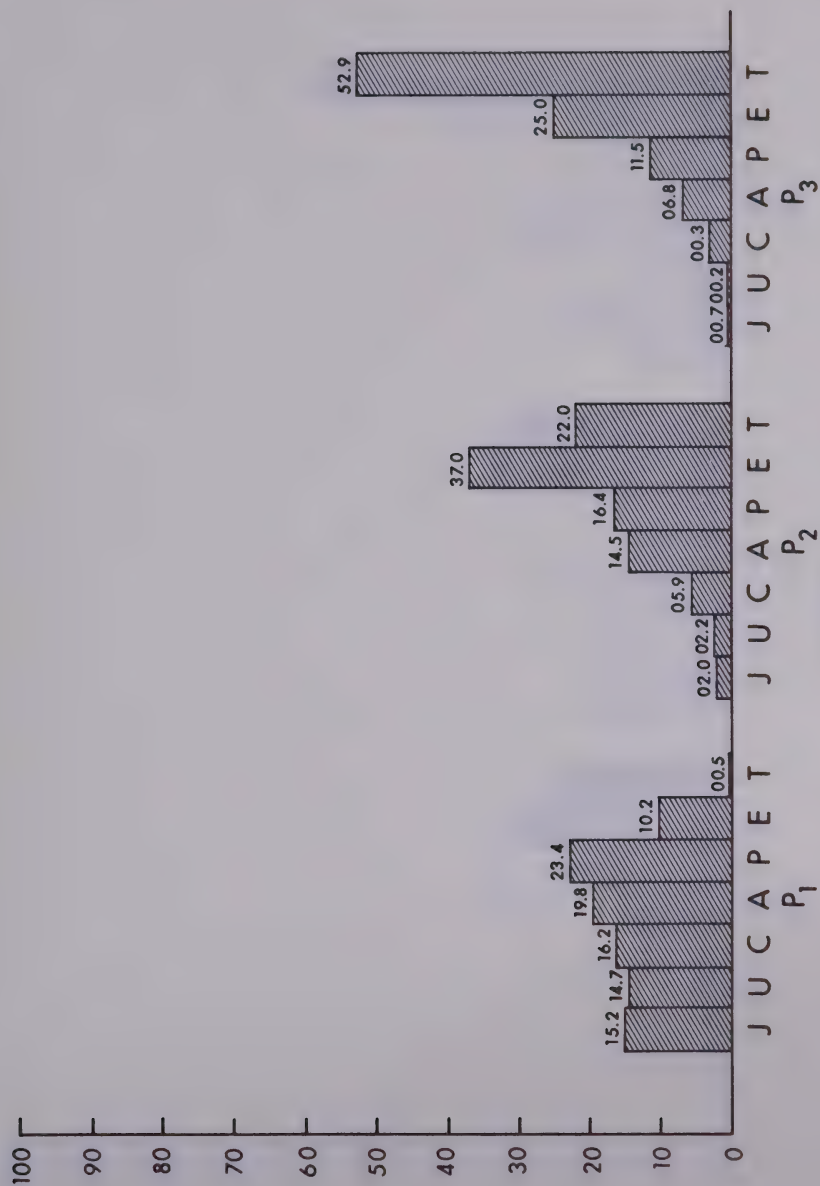


FIGURE 1

USE OF MODES OF PERCEPTUAL ORGANIZATION BY DIFFERENT P. GROUPS



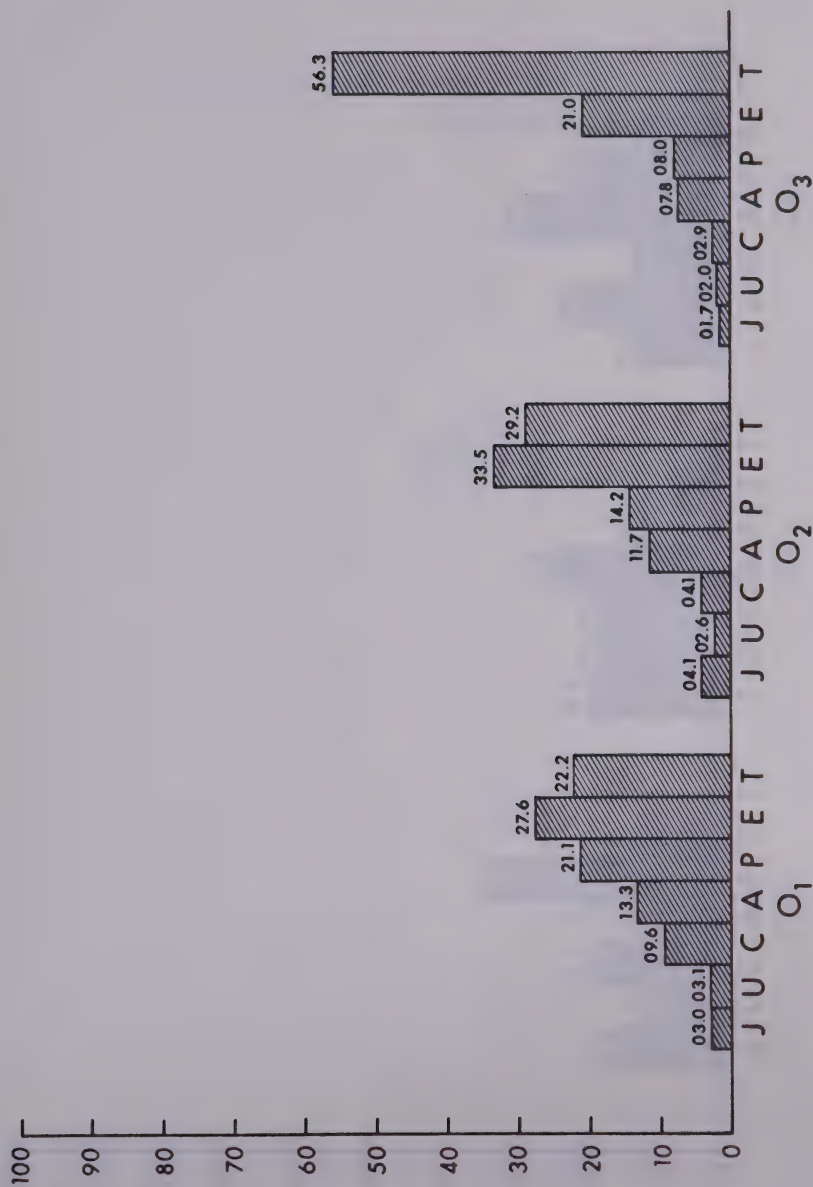


FIGURE 2

USE OF MODES OF PERCEPTUAL ORGANIZATION IN DESCRIBING DIFFERENT O. GROUPS



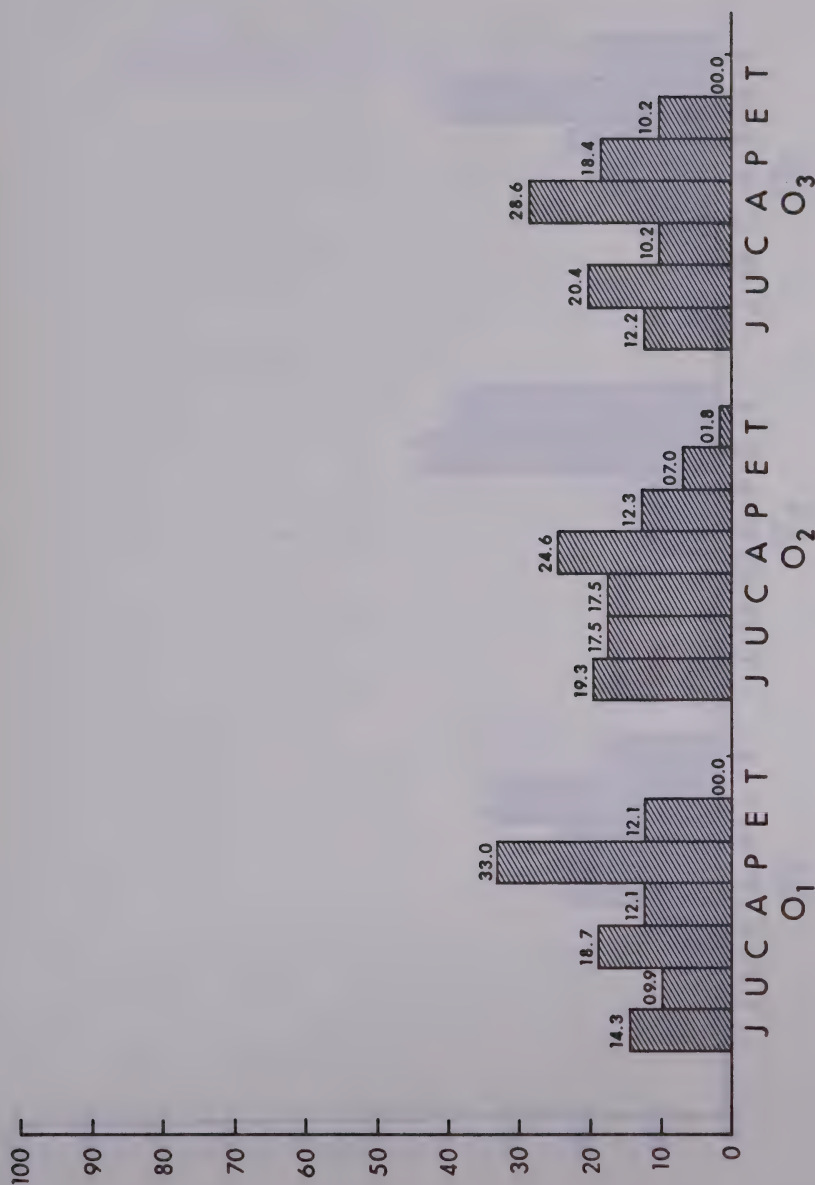


FIGURE 3

USE OF MODES OF PERCEPTUAL ORGANIZATION BY P. GROUP 1 IN DESCRIBING  
DIFFERENT O. GROUPS





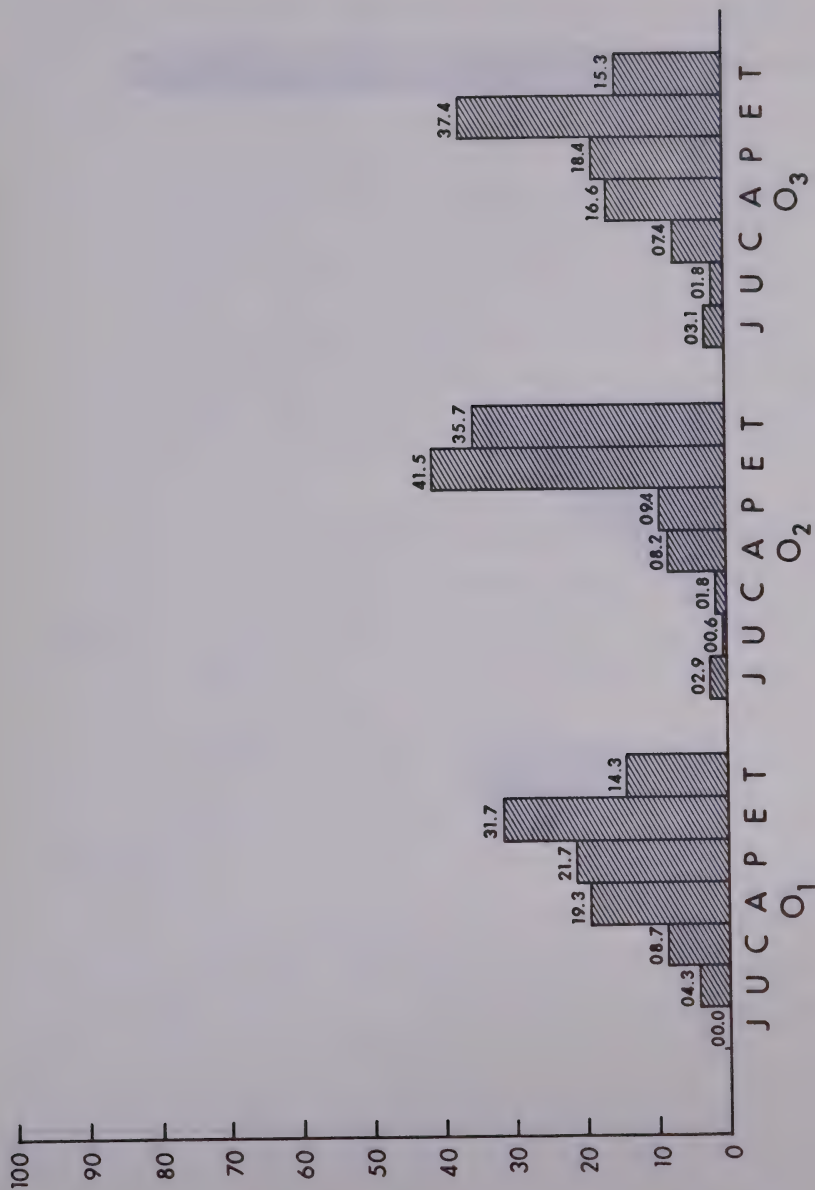


FIGURE 4

USE OF MODES OF PERCEPTUAL ORGANIZATION BY P. GROUP 2 IN DESCRIBING DIFFERENT O. GROUPS



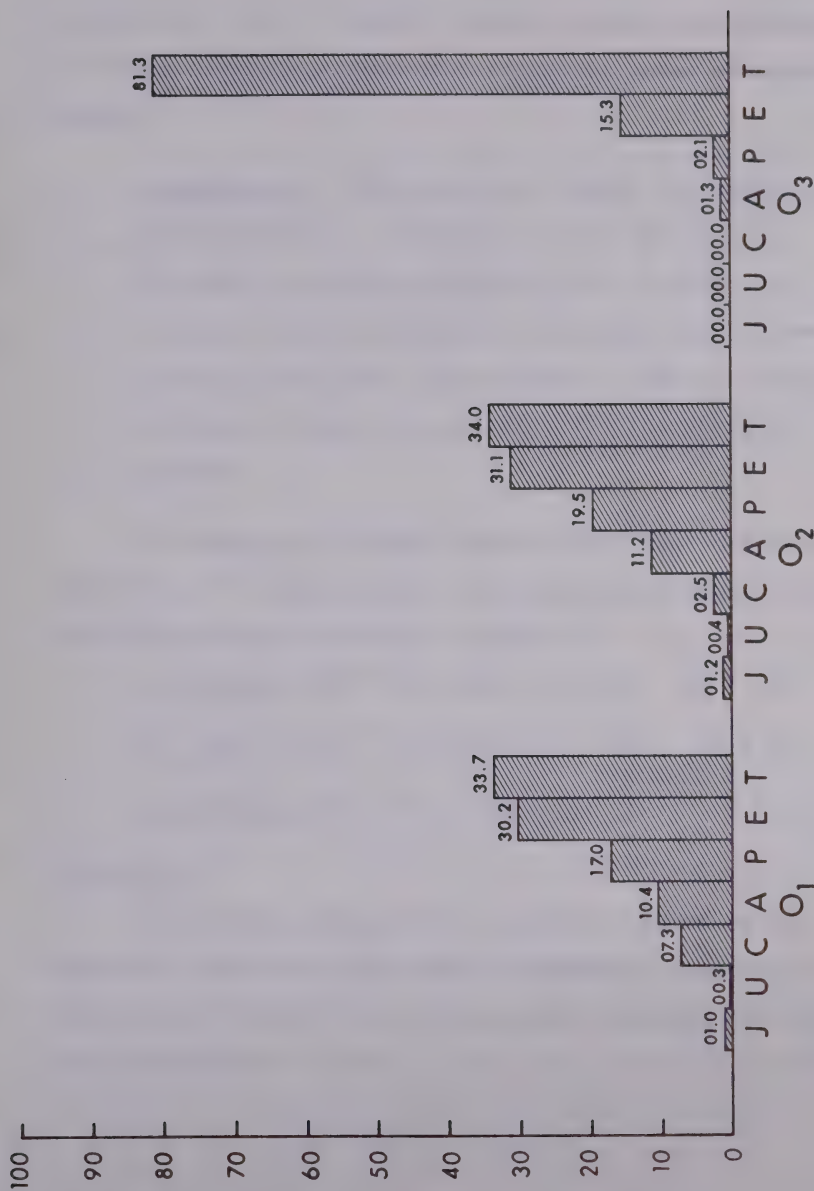


FIGURE 5

USE OF MODES OF PERCEPTUAL ORGANIZATION BY P. GROUP 3 IN DESCRIBING  
DIFFERENT O. GROUPS



$p < .001$ ;  $df = 12$ ). Figure 2 clearly shows that different O. Groups activate different patterns of modes of organization.

Hypothesis 6: The pattern of modes of perceptual organization is a function of the age distance between the perceiving person and the observed person: the use of higher order perceptual modes will increase with the decrease in the age distance between the perceiving person and the perceived person.

The analysis of data showed significant differences within the P. Groups in the use of perceptual modes of organization for different O. Groups:

P. Group 1:  $\chi^2 = 21.03102$ ;  $p < .05$ ;  $df = 12$ ;

P. Group 2:  $\chi^2 = 58.42313$ ;  $p < .001$ ;  $df = 12$ ;

P. Group 3:  $\chi^2 = 239.34818$ ;  $p < .001$ ;  $df = 12$ .

### Reliability

Two judges independently coded one third of the protocols from each experimental treatment conditions. The analysis showed very high agreement between the two sets of coding ( $r = .93$ ).



## CHAPTER IV

### INTERPRETATION AND DISCUSSION

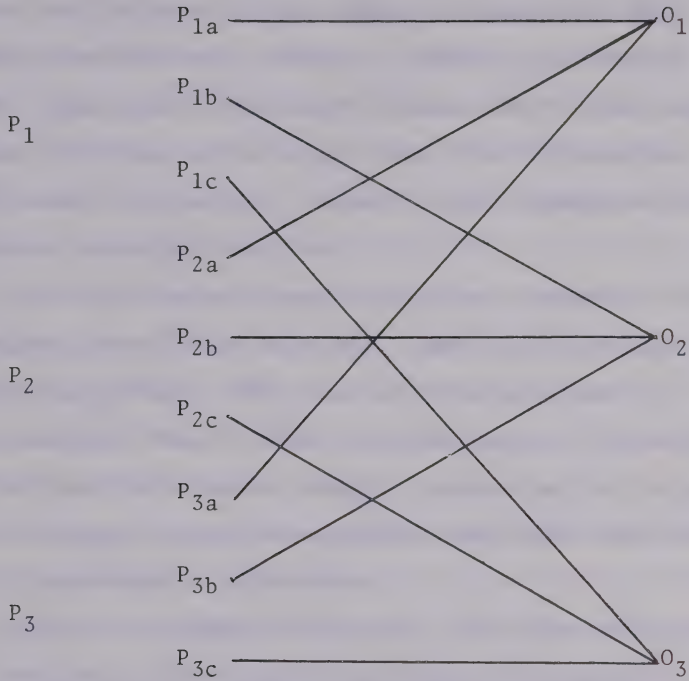
The basic aim of the present study was to understand some of the processes that characterize the development of person perception. An attempt was made to understand both the content and structure of the person perception, and to do this in terms of certain dimensions and the perceived relations between them. Perception was analyzed in terms of two characteristic processes, namely differentiation and organization.

So far we have considered the data in terms of our hypotheses, and in terms of the organismic and ecological variables separately. However, when looking at the total picture, some overall trends are discernible. In order to see these trends, we have to go beyond the statistical presentations (although the statistical analyses do support what will be said) and discuss and illustrate the actual behavior of the subjects during the experimental sessions.

The diagram that follows (Figure 6) is meant to show the initial age distance between the perceiving persons and the observed persons. This provides a base line for understanding the effects of age as an organismic variable and age as an ecological variable on person perception.







Short Distances

$P_{1a}$  —  $O_1$   
 $P_{2b}$  —  $O_2$   
 $P_{3c}$  —  $O_3$

Medium Distances

$P_{1b}$  —  $O_2$   
 $P_{2a}$  —  $O_1$   
 $P_{2c}$  —  $O_3$   
 $P_{3b}$  —  $O_2$

Long Distances

$P_{1c}$  —  $O_3$   
 $P_{3a}$  —  $O_1$

FIGURE 6

AGE DISTANCES BETWEEN THE PERCEIVERS AND THE  
OBSERVED PERSONS



Initially, it was assumed that there would be a positive relationship between increase in the age of the perceiver and increase in the number of dimensions used for describing different persons. However, our results did not show significant differences between the two variables mentioned; in other words at age five, the children are already aware, in some way, of most of the dimensions which the sixteen-year-olds also use.

There were however very significant differences in the frequency with which different dimensions were used by different age groups. The grown up children showed a greater tendency toward inferring psychological dispositional qualities from the observed events, persons and activities while the younger group predominately described what was directly observable in the movies.

The results cannot, of course, tell us at which age before the age of five years (the youngest subjects) all the dimensions in the perception and description of persons are already available to children. Perhaps there is a limit to the increase in the number of dimensions that is attainable, and perhaps this limit is already reached by most children by the age of five or six years. We may have here a parallel to what linguists (Joos, 1964) say about the acquisition of syntax by the child, namely that by the time children come to school the average child has already acquired most of the syntax of his language; what comes after is refinement, the



turning of implicit awareness into explicit awareness, and a concern with semantics, i.e., a greater exploration of the extra-linguistic referents of linguistic statements and a greater ability to find the right linguistic vehicles for articulating and differentiating what is being perceived and thought. However, when children of different age groups use the same number of dimensions, their descriptions are nevertheless completely different at the different age levels, both in quality as well as in depth.

This qualitative transformation in perception is evidenced through the highly significant difference in the frequency with which different dimensions are used by different age groups. In other words, when a critical level of complexity has been reached, one can say that the developmental transformation in person perception, instead of being only an additive process, shows trends towards expansion and articulation within dimensions, where there may be simultaneous, successive or complementary transformations between different sets of dimensions or within as well as between sub-categories of dimensions, depending upon their relevance for the self-organizing principles of experiencing the interpersonal world.

Age as an ecological variable acquires certain stimulus potentialities, which, depending on the distance on the dimension of age between the perceiving and the perceived person (see Figures 2, 4, 5, and 6), activates certain sets of



dimensions which may in turn activate a second or third order combination of dimensions or levels within given dimensions, depending upon the demand character or the existential relevance of the other person.

Such processes of attainment or presentation of the object into consciousness occur at different levels of consciousness, at different levels of reflectiveness and lead to different forms and levels of activity (Schmidt, 1970). In other words, in person perception the process of representation seems to take place through various levels of activities which could be considered as pointing toward a progression, from acting upon, reacting to, to contemplation about the object (Werner and Kaplan, 1963).

This progressive developmental transformation in person perception was very clearly evidenced in our present study. Figure 7 is intended to show some aspects of person perception in pre-school (Figure 7a), elementary school (Figure 7b) and high school Ss (Figure 7c).

The interpersonal perceptual world of the five year old is illustrated in Figure 7a. The shadowed portion shows the overlap of self and other: that the other person has not yet stood out as a separate being 'out there' or that the differentiation is not yet complete. The arrows show the locus of the cause or purpose of the activity performed by A or B or any explanation for A or B's being what they are. The most dominant tendency among five year olds is to give a







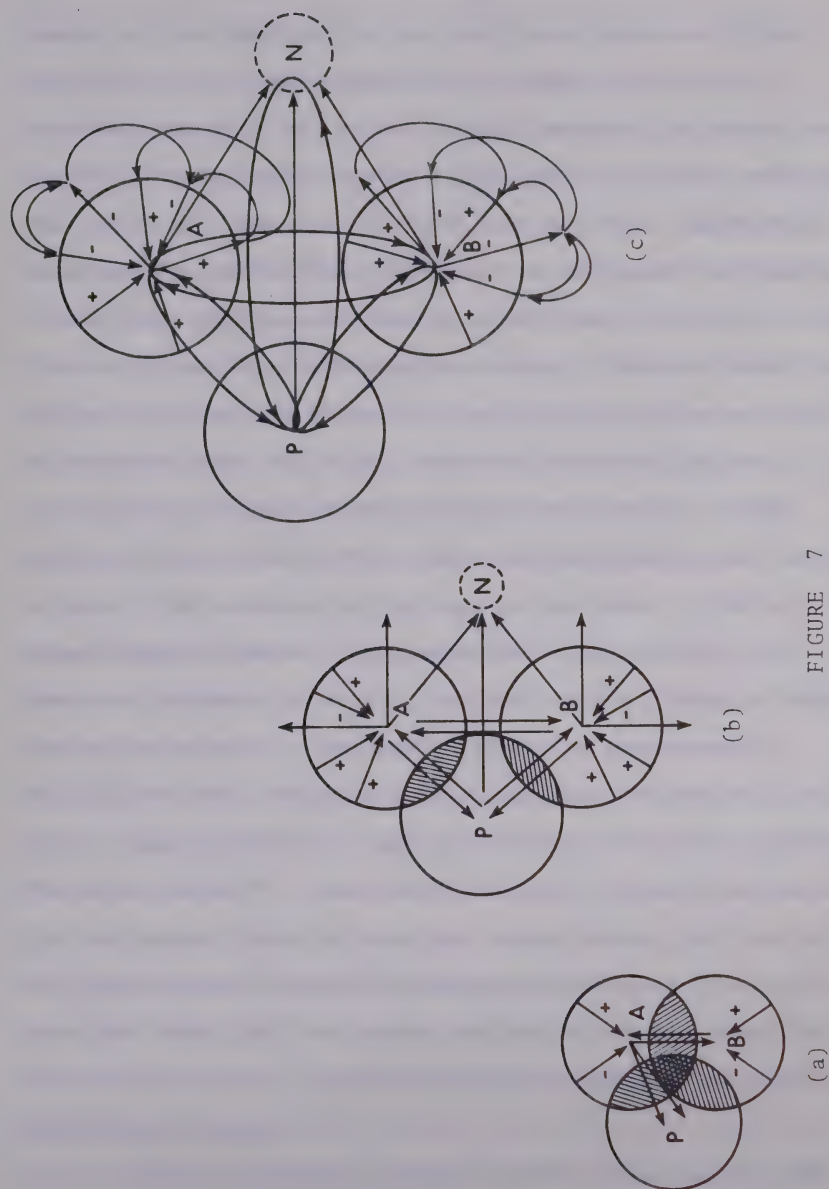


FIGURE 7  
SOME ASPECTS OF DEVELOPMENT OF PERSON PERCEPTION



number of discrete activities and their feelings (likes - dislikes) about them, sometimes accompanied by some inferred personality traits. These personality traits are, however, mostly, what one may call the first order genotype, which must be seen as affective evaluation or functional descriptions rather than causal or teleological explanation. A five year old can see that A is different from B, or A and B are different on different occasions. She can 'heap' one evaluation over the other, or one concrete characteristic or function over the other, without searching for any relationship between them (see Figures 1 and 3). Each trait or event is a self-evident and self-sufficient unit to her. The interpretations are in the form of global-compartmentalization of incompatible traits with a very dominant tendency to reject the task of explaining by ending the sentence with a 'because'. When the experimenter repeats the word 'because', implying that she would like to have a reason the child says with clear eyes and a big nod "Because, Umhum!" -- and there it ends. In most instances the non-verbal behavior was very significant, for the child did not show any signs of tension or confusion or stress when not being able to answer the adult's 'why' question; the child, in fact, probably felt that she had answered it by saying "Because!".

Another dominant tendency in the child is to give what might be called 'external autocentric' explanations.



The sense in which the terms external and autocentric are used will become evident from what follows. While trying to account for some behavior or disposition of A or B the five-year-old child very often, instead of trying to find the locus of the reason within the person being described, tended to shift it toward another person. This shift seemed to be in two different directions. The first was toward her own self: A is good, because "I like her". The five-year-old is often unable to go beyond this simple statement of how the other person affects her. What it is in the other person's behavior that makes the perceiver like that person remains unidentified, and unformulated. Another direction in which the shift occurred was towards another person, i.e., if A is seen as good, then B is seen as bad, and vice versa. If there is a change in perception, so that A, who was originally seen as good becomes bad, then B becomes good.

Whichever direction the shift takes, it seems to be characterized by two tendencies on the part of the child: firstly, to give his explanation not in terms of inherent characteristics of the observed person -- hence the use of the term 'external' explanation, i.e. external to the object of perception; secondly, to give the explanation in terms of the perceiving person's own affective reaction -- hence the use of the term 'autocentric' explanation. The point is not that older children (and probably adults as



well) do not do this as well, but older children are more able to go beyond this first stage of explanation.

We can speculate on reasons why there should be a shift of locus away from the object of concern toward the self or another person. It may be that the adult models of interpretation of children's behavior play a role here. Susan Isaacs (1930) in describing the rationale for dealing with the children's perception of their own behavior and the behavior of other children at her experimental school, states that, as a matter of principle, no general categories such as "naughty", "good", or "horrid" were used by the teachers; instead the statements made by the adults referred to specific behaviors and their consequences. However, the very fact that Susan Isaacs found it necessary to point out that the constant use of the general categories by adults does not help children "to lay hold of social realities" (Isaacs, 1930, p. 33), and warns against their use, implies that using general categories is very general among adults when commenting on other person's (notably children's) behavior. It may be that the children in our sample (probably best characterized as upper-lower class) were also exposed to adult language characterized by general categories and simple dichotomizations such as "she is good", "she is bad". We cannot say whether in a sample of five-year-olds known to be exposed to more discerning adult models of interpretation of behavior of persons the







autocentric external explanations would occur so often.

What Susan Isaacs calls "laying hold of social realities" can also be seen as having implications for the developmental process or task of distinguishing between the self and the other person. We can use Werner and Kaplan's (1963) term here: distancing or polarization between self and the other. The thrust of development is towards increasing distancing between self and the other. How far this distancing will proceed by the age of five or six years will depend, in part, on the models provided by the adults in interpreting the behavior of persons to the child. The general categories and dichotomizations (good, bad), even when the adult uses these in order to help the child, because he believes that the child will not be able to cope with greater complexity, may restrict and restrain the child and retard the child's perception of the other person as well as of himself.

Another point is that since the child touches the world at the periphery, concrete properties and actions may stand out but the other person does not attain the state of being an 'object of contemplation' (Werner and Kaplan, 1963). Distancing, as the process of weighing of probabilities, of placing the person meaningfully on a continuum of being cannot take place when the alternatives are under external control, for distancing is a perceptual mode or means of relating to the object, and consists of, at its initial level,



information processing through orientation to the varied dimensions of the object of concern. Even though the child can sense an array of dimensions he cannot see the discontinuity among them, hence pooling or weighing of the probable and relative significances of the dimensions required for differentiation cannot possibly take place. At this stage the distance between objects or persons is equal to the distance between the self and the not-self, both being contingent upon each other; and the perceiver is at the stage of acting upon the object rather than reacting to it, as in the case of the ten-year-old, or transacting with it, as in the case of the fifteen year old subjects.

At the ten year level, the interpersonal perceptual world becomes more heterogeneously structured, and persons are perceived as different from each other with no overlap or diffusion, but still the objective world tends to remain undifferentiated from the self, as is shown through the shadowed portion between P and A and P and B (see Figure 7b). The diagram is intended to illustrate that the discontinuity or differentiation in the perceived world, or between the objects out there in the perceived world, take place earlier, or more rapidly, than between the self and the not-self, although in the beginning the progression seems to be both simultaneous as well as reciprocal. At this stage the direction of the vectors tend to shift



gradually from overconcentration on self, towards the centre of the person being perceived.

However, the most important organizing or integrating factor behind the observed behavior is the context or the environment where the behavior takes place (see Figures 1, 4 and 7b). The ten year old child quite often refers to interpersonal causation of behavior, but she finds it difficult to achieve independence or distance from her own self. The dimension of reciprocity and its effect on the participants is clearly noticed by the ten year old. Persons at this stage are perceived as being capable of mutual representation but on the other hand the perceiver would not leave them as they are, without expressing strong value judgments of her personal likes or dislikes. However, such value judgements (shown by 'N' in Figure 7b and c) do not represent awareness of any impersonal or suprapersonal reality but more a tendency toward acting upon and reacting to the object of perception in terms of idiosyncratic choices and preferences or value judgments. The ten year old likes 'the good' and dislikes 'the bad' because she is constantly indoctrinated with morals and codes by the adults at the threshold of pre-adolescence. As indicated through one-way signs in Figure 7b, she seems to be aware of the dimension of norms and values but has not reached the stage where she can reflect or contemplate upon them. This somewhat decreases the





distance between the perceiver and the observed persons; this is evidenced by the fact that the descriptions were highly affectively loaded, with exaggeration, sharpening and assimilation of the positive and the negative points in the persons perceived. The dimensions become more pronounced in terms of discontinuous increase in the magnitude of some dimensions over some others.

In later stages of development, however, the interpersonal world becomes more differentiated and objectified. There is a definite trend towards integration and synthesis through combination of individual dimensions into sub-systems or sub-wholes, with different levels of integration and autonomy within and between these, as well as subsumption of conjunctive, disjunctive, and complementary sub-systems under still higher order systems (movement toward the radix, i.e. fourth and fifth genotypic level). In Figure 7c, this is shown through constant interaction between the different dimensions and modes of organization indicated through the feedback-loops, which actually stand for a characteristic shift toward increasing reflectiveness and contemplation upon the object of perception. The most important change perhaps takes place with respect to the dimensions of norms and values and their assimilation into the patterns of perceptual modes of organization (indicated as 'N' in the Figure 7b and 7c). The distinction between the pre-adolescent and adolescent perception of the





dimensions of norms and values can be best expressed through the words of Lewin:

Values influence behavior but have not the character of a goal (that is, of a force field): For example, the individual does not try to "reach" the values of fairness but fairness is "guiding" his behavior. It is probably correct to say that values determine which types of activity have a positive and which have a negative valence for an individual in a given situation. In other words, values are not force fields but they "induce" force fields. That means values are constructs which have the same psychological dimension as power fields. [Power fields refer to the power of another person to control the behavior of p.] (Lewin, 1944, p. 14).

A new order of reality is created through the establishment of cognitive objectivity of values. These are reinterpreted by the adult as requirements of an impersonal or suprapersonal objective order which are also dispositional in character and intersubjective in validity (Heider, 1958). Heider elaborates this point further, showing its implications for developmental study by saying:

Psychologists generally agree that in the early part of the life of the individual there is a lack of separation between the ego and the environment, that is, between the personal and impersonal entities of a biospheric occurrence. If this is the case, then the differentiation between the want and the ought, or between "p likes x" and "x is a value," both requiring a differentiation of the personal from the objective, must also involve a developmental process. (Heider, 1958, p. 229).

This process involves increasing intrapersonal as well as interpersonal distancing.



Regarding the modes of perceptual organization, initially, it was expected that there would be a shift from the so-called relatively more primitive to relatively higher levels of organization. In terms of a unilinear concept of developmental progression it was thought that with the increase in the age of the perceiver there would be more concentration on the higher level modes, and lower modes would lead toward the emergence of higher modes of perceptual organization, thereby becoming subordinated to higher modes. What in fact was found was that the modes of organization undergo transformation with the age distance between the perceiver and the perceived persons (see Figures 1 to 5). One might, in line with the classical rationalists, say that the mind functions in an organismically determined way, that there is some innate disposition for orienting to other persons, that the general form of systems of knowing is fixed in advance as a disposition of the mind, and the function of the experience is to cause this general schematic structure to be realized and more fully differentiated. This innate knowledge is in the form of unconscious potentialities and the mind is not conscious of its formalizing activities while cognizing objects, persons or events.

As Chomsky (1968) says about the classical rationalist view:



the mind contains a "system of common notions" that enable it to interpret the scattered and incoherent sense data in terms of objects and their relations, cause and effect, whole and part, symmetry, gestalt properties, functions and so on. Sensation, providing only fleeting and meaningless images, is degenerate and particular. Knowledge, much of it beyond immediate awareness, is rich in structures, involves universals, and is highly organized... (Chomsky, 1968, pp. 48,50).

Change in the total structure of perceptual modes may appear to be discontinuous in terms of quality, especially when they are used in an amorphous way, all the modes occurring equally often, over a period of time, without any apparent logical or psychological relationship between them. In such cases it is hard to find out an identifiable theme or structure in person perception. However, such processes may have their own significance as they may fulfill some basic 'requiredness' in the total context of the transaction within a potentially significant interpersonal environment. During the period over which such 'all-or-none' perceptual processes occur, orientation to the world may not seem generative in the sense of creation or transformation of meaning. However, relatively more identifiable qualitative transformations may occur when the modes tend to form a system or subsystem in terms of their similarity, dissimilarity, complementarity or other relationships; in other words, when the modes acquire a certain degree of mobility and





confluence to enter into positive or negative feedback relationship with each other.

One might say that here the organism attains a state when it can 'modalize' itself with the form or the rhythm of the object that he 'feels like knowing' and therefore 'must orient himself toward knowing it'. This process of modalization of the consciousness, through the removal of the so-called subject-object dichotomy, establishes the conditions for the emergence of 'objectification' in the true sense of the term.

When the organism reaches such a state of awareness through the successive stages of acting upon and reacting to the object, then a kind of dialogue is established between the knower and the object of knowledge, where both stand out, as it were, in reciprocal perceptibility and perceptual sensitivity. In the context of person perception, the perceiver becomes spontaneously tuned toward what Allport (1957) called 'configural comprehension' of the uniqueness of the other person. All possible activities, even the slightest gestures, postures or body inclinations, are noticed at once, but an oriented organism would not juxtapose one muscular twitch of the face or one body movement over the other, but would adapt or modalize itself according to the demand character of the object, and try to grasp its meaning.

In other words, one may use several modes of





perceptual organization while all of them may not be used equally often. Besides, one may order the modes in an hierarchic order, which may be relatively invariant for a given class of objects, events or persons. For example a person belonging to a given age group may have an identifiable pattern of modalizing his perception to the persons belonging to his own age group while he may shift and reorganize his perspective while trying to apprehend the behavior of a person who is younger or older than he is.

We can clearly see these trends in the histograms (see Figures 1, 2, 3, 4, and 5). Each histogram is unique in its structure and distribution of different modes and shows some kind of invariant relationship between the modes in different forms of AOV x AEV interactions. That is, certain modes tend to go together, while certain others do not, e.g. high frequency of the mode of contextual variability is always accompanied by high frequency of thematic organization, but high frequency of juxtaposition is always accompanied by a low frequency of either contextual variability or thematic organization and so on (see Figures 1, 2, 3, 4, and 5).

Thus it seems that when one perceptual mode is activated, this may lead to the activation of some other perceptual modes because of their mutual interdependence. Developmentally speaking, one might expect some kind of differential patterning of the modes, determined by the



organismic state of the perceiver and his initial knowledge about the class to which the object belongs (in the present study the age group of the observed persons), and the immediate nature of the situation.

However the present study seems to suggest that perception of the child does not necessarily need to start at the so-called lower level; or it is not that higher level processes would always occur only at the chronologically higher levels. In other words, one cannot have a general base line, across a species or at the ontogenetic or microgenetic levels irrespective of the total organismic and environmental contexts.

The concepts of hierarchic integration and that of "genetic spirality" as suggested by Heinz Werner (1957) seem to imply, at least in part, such a notion of development, where he grants survival of the lower levels at higher levels. Werner, however does not seem to suggest very explicitly, that the various modes of perceptual organization may co-exist as mutually interacting or mutually generative modes. However, one finds that in the basically heterogeneous world different forms and patterns of events exist side by side demanding different modes and levels of orientation. There are objects and events which can be grasped and understood only through felt experiences rather than perceptual scanning. Similarly, conceptualization about a relatively unknown process even by a cognitively mature



person initially does require a wide range of information and use of so-called lower or intermediate levels and modes of organization. In such circumstances, the relatively lower order modes are actually generated through or aimed at higher order contemplation or conceptualization about the object of concern.

It seems that the criterion of frequency of occurrence of differential modes cannot be taken as the only measure of their hierarchic organization: or in other words a less frequently occurring mode may not necessarily be under the sub-ordination of the mode that occurs more frequently. They may obtain on equal level as functions of 'requiredness' of the total perceptual field.

One might say that regression to the object is a necessary step in the progression toward the achievement of the object.

Actually the essential multilinearity of the process of genetic transformation itself negates the notion of unilinear rank ordering implicitly suggested in the concept of hierarchic organization (Bunge, 1960). The question of possible genetic redundancy could be resolved to a great extent if one gives due regard to the demand character or the salience of the object of perception. The tendency toward the 'ludic' and 'affective' rather than 'representational' or 'dialectic' usage of language (Kaplan, 1959) in the grown up's descriptions of the younger ones may also be



taken as indication of the basic process of genetic stratification and the mutually generative functions of the different perceptual dimensions and modes in person perception.

I. LIMITATIONS OF THE PRESENT STUDY AND SOME  
IMPLICATIONS FOR FUTURE STUDY IN DEVELOPMENT  
OF PERSON PERCEPTION

On awakening from the world of assumptions and speculations, when one encounters the world of the facts and phenomena, one feels like being attacked or challenged, as it were, by what is best expressed by the German word 'Aufforderungscharakter'. One then starts wondering if one can really grasp its meaning; nevertheless, one has to come to terms with one's own limitations as well as with the situational contingencies, assuming that after all, and above all, the 'phenomenon' still exists and will continue to exist in its fullness of meaning.

In the present research we made an attempt to understand some aspects of the characteristic transformations in person perception that result from variations in the ages of the perceiving and the observed persons. We confined our sample to a limited cross-section of age range and socio-economic level. We also did not study the effects of several significant variables that we are interested in. We took only the variable of 'age' leaving out the role of







such other factors in person perception as ethnic and racial differences, differences in role relations, kinship structures, linguistic differences, etc.

It should be indicated at the outset that the present report does not include all the analyses that were carried out, e.g., patterns of differentiation and organization as influenced by the differential patterns of consistency in the behavior of the observed persons, and the clusters of perceived traits measured in terms of correlations between them.

It was felt during the experimental sessions and also while analyzing the taped descriptions that the patterns and processes of perception evidenced in the descriptions could also be understood very meaningfully through a micro-genetic approach. Also, the non-verbal behavioral patterns manifested in the various forms of gestural, postural and intonation patterns were so fascinating that the necessity of studying these became very obvious; the data recorded on the tapes could be used for a study of some verbal and non-verbal aspects of language structure in person perception following the same basic hypotheses and experimental design. A second study of non-verbal behavior, especially of the patterns of eye-movement, pupillary reflexes and changes in the body tonus, etc., when one sees a person of one's own age or persons belonging to different age levels, could also be carried out.



The general theoretical model followed in the present study could also be used to generate methods which would make it possible to study the effects of age difference and generation difference on person perception. One could also take the variable of time of the study, i.e., the total environmental impact occurring at a given temporal point in the history of the group or culture studied. These problems could be studied through cross-sectional, longitudinal or time lag methods as suggested by Schaie (1964, 1965).

The non-parametric analysis used in the present study could be substituted by a parametric analysis, where the bi-factorial developmental model may be conceptualized as a bi-factorial analysis of variance design, involving the same or different levels of the same factors, i.e., age and generation. Furthermore, it might be tested whether the functional relationships between age and generation fit in with the developmental trends postulated by different theoretical viewpoints such as those of Werner, Piaget, Bruner, Brunswik, Helson or Kagan.

It is hoped that systematic study of age, generation, or cultural (ethnic and historical time lags) effects would help considerably toward the much needed "knowledge about" as well as "acquaintance with" and understanding of one's fellow beings in our continuously changing and expanding interpersonal world.



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## A P P E N D I X     A

### LETTER OF PERMISSION TO PARENTS





# PERMISSION SLIP

Dear Parent or Guardian:

We are currently engaged in a study of how children form impressions of other persons. This may improve our understanding of children at different stages of their development.

The children would be taken to the University and returned to the school by taxi during the school hours. At the university the children will be shown five minute videotape recordings of other children, and their reactions will be studied. Each child would spend about 1 1/2 hours on this. Your child will be cared for and adequately supervised during the period that she is participating in the study at the university. The results would be used only for research purposes and will, of course, be confidential.

In order that we may be sure that we are not operating contrary to your wishes as a parent may we ask you to complete this form letter and return it to the principal of the school which your child attends.

-----

My child \_\_\_\_\_ who is currently enrolled at \_\_\_\_\_ School has my permission to participate in the study of impression formation in children being conducted at the University of Alberta, with the understanding that my child will be cared for and adequately supervised during the period that she is participating in the study at the university.

\_\_\_\_\_  
Parent or Guardian's Signature

\_\_\_\_\_  
Home Address                      Telephone Number

\_\_\_\_\_  
Date

Thank you very much for your cooperation.

Yours truly,

W.H.O. Schmidt  
Professor of Ed. Psychology and  
Chairman of the Supervisory Committee  
for Ph.D. Research of Miss Gon

Manjuli Gon  
Commonwealth Scholar



## A P P E N D I X      B

### INSTRUCTIONS FOR THE EXPERIMENTERS



## INSTRUCTIONS FOR THE EXPERIMENTERS

It is very important for obtaining accuracy in the research that each experimenter strictly follows the same approach to the total experimental situation. Each experimenter has to remember the following points:

- (1) Each E has to be with her S during the total period of her stay in the University.
- (2) The main reason for having individual Es for each S is to minimize the strangeness of the situation and also to protect against the feeling of being manipulated and suddenly bombarded with questions by a complete stranger.
- (3) Each E is essentially an "Observer" and not a Judge and has to be fully open to the S throughout the session.
- (4) E has to be very careful that she does not show her interpretations and evaluations of the behavior of the persons shown in the movie, or the behavior of the S through her language, intonation or any other non-verbal cues.
- (5) E should not discuss anything about the movie with S. Ss are not expected to know anything more than what they are told in the group instructions. This is one of the underlying controls of the experimental design. If they ask anything, E can just say "Well, this is what they did" or "Well, this is what happened."
- (6) E's major task is to establish the needed rapport with the S and to create an adequately permeable situation so that S could spontaneously come out with her impressions and interpretations of the characters and events shown in the movie.
- (7) In the interview, while asking any question about the 15-16 year old Os (girls shown in the movie) E should always say 'girls' and 'children' for the 10-11 years and 'little children' for the 5-6 year old girls, especially when asking the questions in Part 2 of the questionnaire, where descriptions are given.
- (8) One way of achieving the needed objectivity and detachment from one's own interpretations and evaluations may be through the focussing of the total attention on



the S, i.e., trying to see the child as a phenomenon, as an independent being in nature, as she tries to communicate her impressions and evaluations in her own unique ways, through verbal and nonverbal cues (gestures, body inclination, movements of the different parts of the body).

- (9) After the conclusion of the experiment each E has to prepare a report of the behaviour of the S. For the purpose of the present study all that we need is a detailed description of the overall behaviour of the S specially when she watches the movie or describes her impressions. Try to write the description in short sentences using more verbs than adjectives and adverbs, and avoiding clauses as much as possible.





## A P P E N D I X      C

INSTRUCTIONS TO THE SUBJECTS AND THE  
QUESTIONS ASKED DURING THE INTERVIEW



## INSTRUCTIONS AND QUESTIONS

Section 1:Orienting the Subject to the Experimental Situation:

Each S would be taken individually to the experimental room by an experimenter who should try to make some informal acquaintance (by being close to the child, calling her by her first name, etc.).

(a) Group Instruction:

"Now, I think we are all set for the movie. We are all going to see it together. Now, before we start the movie, I think I should tell you something about the purpose of our study. As I told you earlier when I visited your school that we will be showing you a movie. Now, you must be wondering why do we want you to see it. Well, you know all of us here ... are very much interested in knowing about girls of your age because we want to write a book about you ... how you feel about others, etc. We are particularly interested in knowing how children/ girls of your age, feel about girls who are of your age or who are either younger or older than you, when they see them for the first time or see them in a movie as you are going to see now."

(b) Instruction to the S Just Before the Movie:

"Now, we are going to start the movie. Watch carefully as you must remember that you have to tell us about your impressions about the girls/children that you will see in the movie. Now, in this movie, you are going to see two girls (who are of your age/ younger than you/ older than you; as the case may be) doing things which they usually do during their free hours in the school. We are going to show you some of the things that really happened when these two girls were together. Now, you watch them carefully and tell us how you feel about them. We are very keen to know how you feel about and what do you think about them, I mean what kind of girls/ children are they? What do you think they are doing, why they are doing it and what will they do afterwards? Now at this point I would like to tell you one thing ... we are interested in knowing your own feelings, i.e. what you think or feel about these girls. So it is very important that you do not discuss your ideas with any one of your friends here or in the school. We will record everything you say. After we finish the



movie we will immediately move to another room and then each of you will tell us what you thought and how you felt about the movie. Okay?

Now, let us come back to the movie. As I told you earlier, we are going to see two girls (who are of your age/ younger than you/ older than you). As we do not know the real name of these girls, we will call them Mary and Jane. And when you say something about them it would be easier for us if you mention their names."

(c) The Movie:

Now, here we start. First we will see Mary and Jane. Do you want to see them again? Now, let us see what Mary and Jane are going to do!

(d) Narration: (Only for the 5-6 year old subjects)

(1) See, here comes Mary and Jane. \_\_\_\_\_ They are moving toward the shelf. \_\_\_\_\_ They are picking up several things it seems. Now, watch what happens next!

(2) Now look! Mary and Jane are sitting side by side. Watch carefully what is happening.

(3) It seems Mary is going somewhere. Look what Jane is doing. \_\_\_\_\_ Mary is coming back. \_\_\_\_\_ Look at both of them \_\_\_\_\_ and see what they do.

(4) It looks like Jane is trying to build something. Watch her carefully. \_\_\_\_\_ Now here comes Jane. \_\_\_\_\_ Look at both of them and see what each of them is going to do next.

Section 2:

(a) Individual Instruction Before the Interview:

"Now, tell me all about what you saw in the movie -- Tell me what kind of girl is Mary/ Jane? ... What was happening and what would have happened? Tell me what they were doing, thinking and feeling, etc? And also how they feel about each other?" Then the S should be given the opportunity for spontaneous description without any interruption by the E. When S stops or cannot go further, E should proceed slowly with the following questions. The questions are meant to seek information about certain dimensions and hence if S has already given



that sufficiently in the spontaneous description, such questions should not be repeated, but the E has to be very careful that she does not miss any relevant information.

(b) Questions:

Part 1:

Each question should be asked separately for Mary and Jane.

1. Tell me how you feel about Mary/ Jane? What kind of a girl is Mary/ Jane? What else? What else?
2. Why do you feel that way about Mary/ Jane? Any thing else? ...
3. Could you tell me how Mary/ Jane feels about Jane/ Mary?
4. Why do you think Mary/ Jane feels that way about Jane/ Mary? What else? ...

Do you think they like each other? What makes you think that way? (Depending upon the answer of the S it can be further elaborated, e.g. why does Mary/ Jane dislikes/likes Jane/ Mary?

5. Which girl/child do you like best? Why do you like her more? Any other reason?
6. Who do you think is the nicer of the two? What makes you think so?

Part 2:

Now, I am going to read to you some short descriptions about children of your own age/ girls older than you/ little children who are younger than you (depending upon which age group is being shown). I will read one at a time. Listen to me carefully and tell me which of the descriptions fits Mary and which one fits Jane or both.

1. Some children/girls are very helpful, they always like to help others. How helpful do you think is Mary/Jane? Who do you think is more helpful? Why? What else?
2. Some children/girls when they start doing something, they always finish it, even if it is hard, but some do not. Does Mary or Jane always finish what they start?





3. Some children/girls are always nice to others but some are sometimes nice and sometimes not nice. Is Mary/ Jane always nice to others? What makes you think so? What else? What else?
4. Some children/girls always do what they are asked to do. Do you think Mary/ Jane does that? What makes you think that way?
5. Some children/girls can do most of the things by themselves while some always need help from others. What do you think of Mary/Jane? Who do you think needs more help? What makes you feel that way?
6. Some children/girls do not pay attention to their work and disturb others. Who do you think pays more attention and who do you think disturbs others more? What makes you think/feel that way? Any other reasons?
7. Almost every child/girl has something in which she is interested. Can you tell me what Mary or Jane is interested in?
8. Almost all of us have some wish about ourselves ... something we wish would come true, for instance, some of us want to be kind ... some of us want to be beautiful, etc. What do you think of Mary or Jane? What do you think Mary wishes for herself. What do you think Jane wishes for herself? What makes you think so? What else? ...



## A P P E N D I X      D

### CODING MANUAL



## CODING MANUAL

Descriptions given by the Ss are to be coded in terms of certain content dimensions and relationships between them in order to provide measures for the two major characteristic processes in the development of person perception namely, differentiation and organization. These dimensions and modes of organization were selected and formulated on the basis of an inductive- cum-deductive approach discussed earlier under Methodology (see Chapter II).

The Manual has two sections: Section I contains the description of the content dimensions and the sub-categories within each of the dimension. Section 2 contains the description of the modes of Perceptual Organization.

Coding Procedure

- (1) Each of the descriptions as a whole should be read first and then divided into psychological units.
- (2) A unit here refers to a discrete action, reaction or a single characteristic or evaluation on the basis of which the observed persons are described, evaluated and identified.
- (3) When a sentence contains several statements or ideas, each discrete content unit should be coded in one and only one sub-category under a specific dimension. Similarly a sentence should be classified under one and only one mode of perceptual organization.



## SECTION I: CONTENT DIMENSIONS AND SUB-CATEGORIES

01. CLOTHING:

Any response which has a specific reference to a particular item of dress, shoes, etc., of the Os.

- i. Any response which has a reference to any item of dress, etc. at the observed concrete level without any attempt at inferring psychological dispositional qualities or socio-economic status of the Os. Example: Mary had a beautiful dress on.
- ii. Reference to clothing as indicative of psychological and social factors, i.e. an attempt at going beyond the information given (inferred abstract). Example: Jane wants to dress like a hippie.

02. PHYSICAL APPEARANCE:

Reference to any physical characteristic of Os such as height, body proportions, complexion, hair, eyes, face, etc., including physical appearance.

- i. Any reference to physical appearance at the concrete level. Example: Jane has short hair.
- ii. Inference about dispositional quality from the physical appearance. Example: Mary has crooked looks.

03. ACTIVITIES:

Reference to overt actions of Mary and Jane as shown in the movie, without any reference to any specific dispositional factors.

- i. Reference to activities taking place in those parts of the movie showing positive behavior, e.g. picking up things, helping, etc.
- ii. Negative activities, e.g. spoiling the picture, hitting, etc.
- iii. Not clear, e.g. putting the blocks together, playing, painting, reading.





04. AGE:

Specific reference to age as a determinant of an individual trait or cluster of traits and actions of Os.

- i. Reference to earlier age of the O.  
Example: She must have had a very happy childhood....
- ii. Reference to present age of the O. Example:  
This kind of behavior is quite normal at this age.
- iii. Reference to future age of the O. Example:  
She will change with age.

05. SEX:

Specific reference to sex as a determinant of some behavior or disposition.

- i. Similar sex. Example: Girls are generally not aggressive.
- ii. Opposite sex. Example: Jane would be more interested in boys.

06 TOTAL PERSONALITY:

Reference to total personality or such personality traits which dictate the general color of behavior without actually being an instance of that behavior. S makes an effort, as it were, to typify the person by pointing to a dispositional quality or the most central quality of the O on the basis of which a number of other less central or more peripheral traits could be explained. This dimension included two major kinds of comments on the total personality: (a) Undifferentiated - Relatively global pronouncements without any explicit attempt at grasping the radix of the personality and without any attempt at either classification or individualization of the personality. (b) Differentiated - Reference to a more differentiated and distinctive dispositional quality or group of qualities as a syndrome; explicit attempt at grasping the central radix of the person with attempt at abstraction and classification.

Depending upon their evaluative direction, responses under each kind of comments would be coded under three different sub-categories. This dimension would thus have six sub-categories:



- i. Undifferentiated Positive Comments: Example: "She is okay."
- ii. Undifferentiated Negative Comments: Example: "She is bad."
- iii. Undifferentiated Neutral: Example: "She is so so."
- iv. Differentiated Positive: Example: "She is the benevolent type."
- v. Differentiated Negative: Example: "She seems to be a very crooked kind of a person."
- vi. Differentiated Neutral: Example: "I don't know exactly what kind of life she is going to make for herself."

#### 07. ABILITY AND POWER:

Reference to general or specific ability, physical or mental, whether or not attained by training or education, to induce change in oneself or in the environment. This category refers to one of the dimensions of causation or potency. Any response referring to some specific capabilities or capacities, talents, skills and achievements or accomplishments would be coded under this.

- i. Physical Ability:  
Refers to physical abilities such as the ability to do activities demanding some specific physical strength, bodily skill or prowess, physical agility or endurance (lack of fatigue, etc.). Example: Jane can work for hours without getting tired.
- ii. Cognitive Ability:  
The ability to comprehend, remember and handle general as well as specific ideas, ability to pay attention, to extract the intellectual content about a book. The capacity for learning and scholarship, to be smart with lessons, getting good grades in the class. Example: Mary seems to be a real intelligent girl.
- iii. Artistic or Aesthetic, including Orderliness:  
Artistic appreciation and judgement. The ability to feel with delight the sensuous qualities of objects. To be sensitively attentive to the various forms and rhythms of experience and



impressions. To discriminate values in art, literature, music or dance, to appreciate the beautiful. The ability to create in the realm of art. To give adequate expression to feelings and imagination, to write poetry, short stories or musical compositions, to model or paint.

- iv. **Constructive Skill:**  
Ability to combine parts and build and construct. Specific constructive skill not necessarily involving intellectual and other abilities.  
Example: Jane would be better in things requiring constructive skill, such as building a house.
- v. **Ability to Achieve some Goals or Finishing Task:**  
The ability to overcome obstacles, to exercise power, to strive to do some thing difficult as well and as quickly as possible. Ability to work persistently till the task is finished or goal achieved. Generally expressed through such adjectives as: persistent, determined, steadfast, enduring, persevering, dogged, sturdy, capable, etc. Example: Mary will always finish her task.
- vi. **Any Other:**  
Reference to any ability not included above.

#### 08. INTENTIONS AND ORIENTATIONS:

Also refers to the vectorial components or directions of motives and purposes, i.e. causation of actions, interactions and experiences. Generally expressed through verbs such as wants, wishes, intends, etc.

- i. **Cognitive Orientation:**  
Refers to the intention to explore and understand many areas of knowledge, to satisfy one's intellectual curiosity. A cognitive attitude, wanting to observe and conceptualize relations within and between phenomena.
- ii. **Aesthetic including Order:**  
Orientation toward form and harmony in experience and behavior. An essentially hedonistic orientation toward life. Intention to give adequate expression to feelings and experiences. To want to have order and organization in the surrounding, intention to write poetry, compose music, painting and drawing, etc.





## iii. Play:

Refers to the tendency to act for 'fun' without further purpose. Tendency to spend a good deal of time participating in games, sports, social activities and other amusements: enjoying jokes and funny stories, maintaining a light hearted, easy going attitude toward life. Adjectives used for describing such orientation: playful, gay, jolly, jovial, pleasure-seeking, laughter-loving, frivolous, prankish, carefree.

## iv. Constructive:

Intention to construct something. Example: Jane wanted to build a house with the blocks.

## v. Achievement:

The intention to accomplish something difficult; maintain high standard and willingness to work toward distant goals, respond positively to competition, willing to put forward effort, to attain excellence. Tendency to excel oneself, to increase self-regard by the successful exercise of talent. This would often refer to such statements as the tendency to make prolonged and repeated efforts to accomplish something difficult.

## vi. Any other.

09. FEELINGS AND MOODS:

Reference to relatively transient or recurrent emotional states, feelings of pleasure and displeasure, moods, etc.

- i. Happiness,
- ii. Unhappiness,
- iii. Anger and rage,
- iv. Any other.

10. EMOTIONAL ADJUSTMENT: IMPULSIVITY-NON-IMPULSIVITY:

Refers to Os relatively more invariant emotional dispositions that become manifest in specific action forms showing varying degrees of impulsivity of non-impulsivity: (i) Impulsivity: Refers to the tendency to act at the 'spur of the moment' and without deliberation; giving vent readily to feelings and wishes, tendency to be volatile in emotional expression; (ii) Non-impulsivity: Refers to poise, acting with deliberation, ability to postpone one's wishes for greater issues.





# 11. WISHES AND VALUES:

Refers to what according to S the O wishes or desires most for herself. (Descriptions given specially in relation to Question No. 8 in the Interview).

- i. Wishing for animals and objects,
- ii. Knowing (see cognitive intentions),
- iii. Experiencing (combination of pleasure and play),
- iv. Doing things which are practical and useful,
- v. Social affiliation (see affiliation and nurturance),
- vi. Power and recognition,
- vii. Any other (any kind of role, teacher, doctor, etc.)

# 12. INTERESTS AND HOBBIES:

Reference to O's interests and hobbies aside from specific goals and values.

- i. Objects as shown in the movie,
- ii. Activities as shown in the movie,
- iii. Roles and professions, i.e. teaching, nursing, etc.
- iv. Dispositional qualities: good, powerful, etc.
- v. Any other.

# 13. SELF CONCEPT:

S's perception of O's perception of herself, i.e. what does O think of herself and how does she compare or evaluate her personality with others.

- i. Considering oneself as superior or inferior to others (over or under-estimation).
- ii. Acceptance of self as it is.
- iii. Uncertainty and conflict in self perception.

# 14. INTERPERSONAL SENSITIVITY:

Refers to S's perception of O's ability to perceive other persons' attitudes and orientations.

- i. Interpersonal sensitivity. Example: Mary very well knew that Jane would never help her.
- ii. Interpersonal insensitivity. Example: I do not think Jane would bother about other persons attitudes.
- iii. Uncertainty about another person's attitudes and thinking. Example: Jane was not very sure about Mary's intentions.



15. INTRAPERSONAL CONSISTENCY:

Reference to consistency or inconsistency, predictability or unpredictability in perceptual, emotional or other forms of behavior.

- i. Consistent. Example: Mary would always think first before she starts anything.
- ii. Inconsistent: Example: You can never tell what is going on in Jane's mind.
- iii. Both. Example: Sometime she is very consistent but sometimes, she is not.
- iv. Inconsistency as a normal phenomenon. Example: You can not expect her to be good all the time.

16. CHANGE OF TOTAL PERSONALITY:

Reference to change of the total personality as a result of development, mutation, etc.

- i. Changeable. Example: She would change when she sees the world more.
- ii. Unchangeable: Example: I do not think any thing can change her stubbornness.

17. RELATIONSHIPS:

S's perception of existing or possible relation between A and B.

- i. Reference to distance in physical space as shown in the movie. Example: They sat side by side.
- ii. Inferred interpersonal relationship. Example: They seem to be good friends.

18. INDEPENDENCE-DEPENDENCE:

- i. Independence or Autonomy:  
When O is described as free from the influence, control, or determination of other persons, or situations and shows tendency toward self-determination, self-regulation and self-reliance. This also includes efforts at breaking away from social restraints, love for freedom and independence.
- ii. Dependence or Succorance:  
When O's behavior is described as being contingent upon or influenced, controlled and determined by others with inability to take decisions, excessive or marked need for attention, sympathy, protection



and reassurance, and feeling of helplessness and insecurity without these.

19. AFFILIATION-NON-AFFILIATION:

- i. Affiliation:  
When S's behaviour is described as showing liking for other persons, enjoying being in company with the other person or people in general, trying to be together, moving close. Some of the descriptive attributes: liking, warm, friendly, genial, affable, sociable, hospitable, affiliative, etc.
- ii. Non-affiliation:  
Tendency to move away and against people, disliking others. To be very discriminating and critical in the choice of friends. To fight and break with friends, to withhold affection and sympathy. Scornful, selfish, critical, snobbish.
- iii. Ambivalence:  
Tendency to be pulled in psychologically opposite directions, as between denial-affirmation, acceptance-rejection, liking-disliking.
- iv. Indifference:  
Unconcern about the feelings, attitudes or the welfare of others.

20. NURTURANCE-NON-NURTURANCE:

- i. Nurturance:  
Tendency to give sympathy and gratify the needs of others, specially of a helpless O, to assist O in need and dangers, to feed, help, support, console, protect, comfort, nurse and heal. Some of the descriptive terms: sympathetic, compassionate, gentle, maternal, protective, supporting, benevolent, humanitarian, indulgent, forgiving, tolerant.
- ii. Non-Nurturance:  
Tendency toward hostile actions; actions that may cause some kind of threat to another person's well being; opposite of nurturant behavior. Some descriptive traits: aggressive, quarrelsome, threatening, hostile, antagonistic, revengeful, non-charitable, cruel, abusive.



21. DOMINANCE-SUBMISSION:

## i. Dominance:

When O's behavior is described as showing attempts at controlling the behavior of the other persons in the environment, tendency to influence others through suggestion, seduction, persuasion or command. To dissuade, restrain or prohibit. To induce another person to act in ways which accord with one's needs and wishes without any consideration for the same in others. To force others to co-operate and to convince others of the 'rightness' of one's opinion. Some descriptive traits and activities: forceful, assertive, decisive, authoritative, dictator, to point, push, pull, confine and lead others.

## ii. Submission and Abasement:

Tendency toward yielding to the commands and leadership of others. To submit passively to external force. To accept injury, blame, criticism and punishment. To surrender. To become resigned to fate. To admit inferiority, error, wrong-doing or defeat. To blame, belittle and mutilate the self. To seek and enjoy pain, punishment and misfortune.

22. CONSISTENCY IN INTERPERSONAL BEHAVIOR:

- i. Consistency, predictability or reliability.
- ii. Inconsistency, unpredictability, etc.
- iii. Both,
- iv. Inconsistency, etc., as natural.

23. EXHIBITION-SECLUSION:

## i. Exhibition:

O's behavior is described as attempts at becoming the center of attention; enjoying having an audience, engaging in behavior which wins the notice of others; enjoying being dramatic and witty. Tendency toward self display, to make the self conspicuous by wearing unusual or colorful clothing, exhibition of body.

## ii. Seclusion:

Opposite of the above mentioned tendencies.







24. ENVIRONMENTAL: PHYSICAL SITUATION:

- i. Positive:  
Environmental factors that are conducive to O's behavior, and do not impose severe restrictions and barriers and allow the O to act as a self-determining active agent and not as a passive instrument.
- ii. Negative:  
Environmental factors that are not conducive and impose limitations on spontaneous and choice behavior, is potentially harmful for the person.

25. ENVIRONMENTAL: INTERPERSONAL:

- i. Positive:  
Interpersonal relations or the behavior of the other as promoting growth, gratification, and benefit without any effort on the part of the O to cause it or where O is being seen as the passive recipient of benefit, reward and justice.  
Example: It seems every body cares for her.
- ii. Negative:  
Where the behavior of the other person proves to be potentially harmful for the growth of O.  
Example: It seems that nobody likes her at home.
- iii. Compelling:  
Environment forcing the O to confirm to its demands.  
Example: Jane had no choice but to do what she was compelled to do.

26. NORMS:

- i. Behavior in accordance with Norms:  
Honesty, truthfulness. Doing what is generally considered to be good in the society.
- ii. Behavior not in accordance with Norms:  
Dishonesty, swearing, doing what is not considered as good behavior.
- iii. Perception of a 'gap' or 'ought' in the behavior and S indicates a line of action by passing a moral judgement or saying what O should or ought to do.
- iv. Uncertain.



## SECTION II: MODES OF PERCEPTUAL ORGANIZATION

1. JUXTAPOSITION (J):

Organization is considered to be juxtaposed when there is exclusive concern with some observable features and activities of the observed persons, but none of these are interrelated through any kind of explanation. Features from more than one event (e.g. helping, interfering, lying, problem solving, etc.) may be described, in concrete or functional language, but no attempt is made to go beyond the discrete features or attributes for establishing some kind of cause or purpose behind them. There is no recognition of the inconsistency or incompatibility within or between the observed persons. Example: "Jane picked up the crayons and Mary sat down on the chair and started looking at a picture. Then Jane started grabbing Mary's books."

2. UNIVALENCE (U):

The impression consists solely of descriptions of actions or traits of one affective tone, the actions and traits of opposing affective tonality are completely ignored. The subject does not give any account for the denial of a portion of information (does not notice Jane's attempts at helping Mary, if she happens to dislike Jane or Mary's behavior of pushing Jane away if she happened to like Mary.) In such instances the person is typically characterized in evaluative rather than descriptive or explanatory terms. Example: "Mary is nice. She did all the good things in the movie -- she is wonderful!"

3. GLOBAL COMPARTMENTALIZATION OR REJECTION OF TASK (C):

In this mode of perceptual organization there is an implicit recognition of the trait incompatibility within or between the observed persons; but the S tends to exaggerate the incompatibility into contrariety. The tendency toward hyper-differentiation leads to a segregation of the traits into two irreconcilable camps. No attempt at resolution is made through an appeal to the factor of source or to any of the other factors that might be brought into play. Example: "I really don't know what kind of person she is, sometimes she is so nice and sometimes she is so mean."



#### 4. AGGREGATION (A):

At this level the discrete events are perceived as following each other and the S sometimes tends to go beyond the information given to find out some kind of an explanation or relationship between the traits, actions and events. These explanations, however, do not have the status of a continuous theme. Rather than establishing one explanatory principle which would transcend all events and direct their progression, S tends to offer separate explanations for each two set of events. While some other sets of traits or events may be juxtaposed. In some cases, however, when all the events are connected in a chain like manner, different principles may be used for two sets of events, while the principles may not be compatible. Example: Jane wanted to help Mary so she went to her. Afterwards, she changed her mind and started playing scrabble.

#### 5. ORGANIZATION THROUGH REFERENCE TO PSEUDO-EXPLANATORY PERSONALITY TRAITS (P):

There is a recognition of trait incompatibility, positive and negative traits being completely segregated under two camps. The subject does not however, openly reject the task but accounts for the incompatibility - become - contrariety in terms of some "split" in the personality. The invocation of this factor is in effect, simply a recognition of the incompatibility of the trait, but it is introduced as if it accounts for the incompatibility. Moreover, this 'disposition' invoked does not even indicate a recognition of specific traits that could be brought into account for any specific discrepancy in characterization. This is actually a more advanced and attenuated form of the rejection of task, since the subject does not arrive at a resolution of incompatibility of the traits. Example: Jane has a split personality.

#### 6. ORGANIZATION THROUGH CONTEXTUAL VARIABILITY (E):

Here there is a recognition that incompatible characterization may have come about because a person behaves differently in different contexts. No attempt is made however, to give an account of this variability in terms of some deeper lying factor. The statement of variability is taken as sufficient, the unit of the personality at least being



implicit. This is actually a more advanced form of aggregation. This mode of organization is actually a transitional form to advanced modes. Example: Jane could not do the things that she wanted because her parents did not allow her.

7. ORGANIZATION THROUGH THE SUB-ORDINATION OF PARTS  
TO WHOLE AND EVOLUTION OF A GENERAL THEME (T):

At this level the S seems to develop a 'unified theory of personality' about other persons ways of being. Configurations of the congruent and incongruent traits, dispositions and activities are subsumed under one encompassing theme. The other person is perceived in his essential uniqueness, as capable of doing different things yet retaining the basic unity. This also recognizes the various degrees of autonomy or independence of different dispositions and functions of the other person. Recognition of the fact that the other person is basically an active rather than a reactive being. Example: Mary would listen to everybody but she would do what she believes to be right.







# A P P E N D I X      E

## TABLES



TABLE 1.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories		TOTAL
	Observed	Inferred	
P. 1 (5-6 years)	34(97.1)	1(02.9)	35
P. 2 (10-11 years)	2(66.7)	1(33.3)	3
P. 3 (15-16 years)	4(26.7)	1(173.3)	15
TOTAL	4(175.5)	1(324.5)	53
$\chi^2 = 28.30548 \quad p < .001 \quad df = 2$			

TABLE 1.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	24(100.0)	0(00.0)	24
O. 2 (10-11 years)	6(50.0)	6(50.0)	12
O. 3 (15-16 years)	1(058.8)	7(41.2)	17
TOTAL	4(175.5)	1(324.5)	53
$\chi^2 = 14.55102 \quad p < .001 \quad df = 2$			

TABLE 1.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	24(100.0)	0(00.0)	24
O. 2 (10-11 years)	3(175.0)	1(25.0)	4
O. 3 (15-16 years)	7(100.0)	0(00.0)	7
TOTAL	34(97.1)	1(02.9)	35
$\chi^2 = 7.97794 \quad p < .05 \quad df = 2$			

TABLE 1.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	0(00.0)	0(00.0)	0
O. 2 (10-11 years)	0(00.0)	1(100.0)	1
O. 3 (15-16 years)	2(100.0)	0(00.0)	2
TOTAL	2(66.7)	1(33.3)	3
$\chi^2 = 3.00000 \quad p > .05 \quad df = 2$			

TABLE 1.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	0(00.0)	0(00.0)	0
O. 2 (10-11 years)	3(42.9)	4(57.1)	7
O. 3 (15-16 years)	1(12.5)	7(87.5)	8
TOTAL	4(26.7)	1(173.3)	15
$\chi^2 = 1.75933 \quad p > .05 \quad df = 2$			



TABLE 2.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories		TOTAL
	Observed	Inferred	
P. 1 (5-6 years)	104(82.9)	8107.11	112
P. 2 (10-11 years)	21(51.2)	20(48.8)	41
P. 3 (15-16 years)	21(50.0)	20(50.0)	40
TOTAL	145(75.1)	48(24.9)	193
$\chi^2 = 44.90553$			$p < .001$ df = 2

TABLE 2.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	58(74.4)	20(25.6)	78
O. 2 (10-11 years)	50(78.1)	14(21.9)	64
O. 3 (15-16 years)	37(72.5)	14(27.5)	51
TOTAL	145(75.1)	48(24.9)	193
$\chi^2 = 0.51388$			$p > .05$ df = 2

TABLE 2.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	44(88.0)	6(12.0)	50
O. 2 (10-11 years)	30(93.8)	2(6.3)	32
O. 3 (15-16 years)	30(100.0)	0(0.0)	30
TOTAL	104(92.9)	8(7.1)	112
$\chi^2 = 4.12461$			$p > .05$ df = 2

TABLE 2.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	6(42.9)	8(57.1)	14
O. 2 (10-11 years)	8(72.7)	3(27.3)	11
O. 3 (15-16 years)	7(43.8)	9(56.3)	16
TOTAL	21(51.2)	20(48.8)	41
$\chi^2 = 2.78571$			$p > .05$ df = 2

TABLE 2.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Observed	Inferred	
O. 1 (5-6 years)	8(57.1)	6(42.9)	14
O. 2 (10-11 years)	12(57.1)	9(42.9)	21
O. 3 (15-16 years)	0(0.0)	5(100.0)	5
TOTAL	20(50.0)	20(50.0)	40
$\chi^2 = 5.71428$			$p > .05$ df = 2



TABLE 3.1

Relationship between Age of Perceiver and Use of Sub-categories within the Dimension

P. Group	Sub-categories Activities Positive	Activities Negative	Activities Not Clear	TOTAL
P. 1 (5 - 6 years)	37(21.3)	48(27.6)	89(51.1)	174
P. 2 (10 - 11 years)	88(18.7)	164(34.8)	219(46.5)	471
P. 3 (15 - 16 years)	137(26.0)	156(29.7)	233(44.3)	526
TOTAL	262(22.4)	368(31.4)	541(46.2)	1171
$\chi^2 = 10.54161 \quad p < .05 \quad df = 4$				

TABLE 3.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Activities Positive	Sub-categories Activities Negative	Activities Not Clear	TOTAL
O. 1 (5 - 6 years)	95(22.7)	117(28.0)	206(49.3)	418
O. 2 (10 - 11 years)	79(20.3)	131(33.6)	180(46.2)	390
O. 3 (15 - 16 years)	88(24.2)	120(33.1)	155(42.7)	363
TOTAL	262(22.4)	368(31.4)	541(46.2)	1171
$\chi^2 = 5.65229 \quad p > .05 \quad df = 4$				

TABLE 3.3

Perceiver Group 1 (5 - 6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories Activities Positive	Activities Negative	Activities Not Clear	TOTAL
O. 1 (5 - 6 years)	13(20.6)	13(20.6)	37(58.7)	63
O. 2 (10 - 11 years)	14(22.6)	14(22.6)	34(54.8)	62
O. 3 (15 - 16 years)	10(20.4)	21(42.9)	18(36.7)	49
TOTAL	37(23.3)	48(27.6)	89(51.1)	174
$\chi^2 = 8.75135 \quad p > .05 \quad df = 4$				

TABLE 3.4

Perceiver Group 2 (10 - 11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Activities Positive	Sub-categories Activities Negative	Activities Not Clear	TOTAL
O. 1 (5 - 6 years)	32(22.1)	49(33.8)	64(44.1)	145
O. 2 (10 - 11 years)	28(16.3)	67(39.0)	77(44.8)	172
O. 3 (15 - 16 years)	28(18.2)	48(31.2)	78(50.6)	154
TOTAL	88(18.7)	164(34.8)	219(46.5)	471
$\chi^2 = 3.77924 \quad p > .05 \quad df = 4$				

TABLE 3.5

Perceiver Group 3 (15 - 16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Activities Positive	Sub-categories Activities Negative	Activities Not Clear	TOTAL
O. 1 (5 - 6 years)	50(23.8)	55(26.2)	105(50.0)	210
O. 2 (10 - 11 years)	37(23.7)	50(32.1)	69(44.2)	156
O. 3 (15 - 16 years)	50(31.3)	51(31.9)	59(36.9)	160
TOTAL	137(26.0)	156(29.7)	233(44.3)	526
$\chi^2 = 7.34113 \quad p > .05 \quad df = 4$				





TABLE 4.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories	TOTAL
	Early	Future
P. 1 (5- 6 years)	1 (09.1)	5 (45.5)
P. 2 (10- 11 years)	19 (43.2)	19 (43.2)
P. 3 (15- 16 years)	52 (34.4)	50 (26.5)
TOTAL	72 (35.0)	70 (34.0)
$\chi^2 = 13.73636 \quad p < .01 \quad df = 4$		

TABLE 4.2

Relationship between Age of Perceived persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories	TOTAL
	Early	Future
O. 1 (5- 6 years)	45 (40.9)	32 (29.0)
O. 2 (10- 11 years)	14 (20.3)	19 (27.5)
O. 3 (15- 16 years)	13 (48.1)	12 (44.4)
TOTAL	72 (35.0)	64 (31.1)
$\chi^2 = 21.68434 \quad p < .001 \quad df = 4$		

TABLE 4.3

Perceiver Group 1 (5- 6 years). Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories	TOTAL
	Early	Future
O. 1 (5- 6 years)	1 (33.3)	1 (33.3)
O. 2 (10- 11 years)	0 (00.0)	3 (100.0)
O. 3 (15- 16 years)	0 (00.0)	5 (100.0)
TOTAL	1 (09.1)	5 (45.5)
$\chi^2 = 8.21333 \quad p > .05 \quad df = 4$		

TABLE 4.4

Perceiver Group 2 (10- 11 years). Use of Sub-categories within the Dimension in Describing Different Groups

O. Group	Sub-categories	TOTAL
	Early	Future
O. 1 (5- 6 years)	18 (56.3)	10 (31.3)
O. 2 (10- 12 years)	0 (0.0)	5 (8.3)
O. 3 (15- 16 years)	1 (16.7)	4 (66.7)
TOTAL	19 (43.2)	19 (43.2)
$\chi^2 = 9.00344 \quad p > .05 \quad df = 4$		

TABLE 4.5

Perceiver Group 3 (15- 16 years). Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories	TOTAL
	Early	Future
O. 1 (5- 6 years)	26 (34.7)	22 (29.3)
O. 2 (10- 11 years)	14 (23.3)	14 (23.3)
O. 3 (15- 16 years)	12 (27.5)	4 (25.0)
TOTAL	52 (34.4)	40 (26.5)
$\chi^2 = 19.81754 \quad p < .001 \quad df = 4$		



TABLE 5.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories		TOTAL
	Similar	Opposite	
P. 1 (5- 6 years)	1112.5)	7187.5)	8
P. 2 (10-11 years)	0.00.0)	0.00.0)	0
P. 3 (15-16 years)	4122.2)	14177.8)	18
TOTAL	5119.2)	21180.8)	26
$\chi^2 = 0.33704$ $p > .05$ $df = 2$			

TABLE 5.2

Relationship between Age of the Perceived persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories		TOTAL
	Similar	Opposite	
O. 1 (5- 6 years)	0.00.0)	31100.1)	3
O. 2 (10-11 years)	31100.1)	0.00.0)	3
O. 3 (15-16 years)	2110.0)	18190.0)	20
TOTAL	5119.2)	21180.8)	26
$\chi^2 = 14.41142$ $p < .001$ $df = 2$			

Perceiver Group 1 (5- 6 years). Use of Sub-categories within the Dimension in Describing Different Age Groups

This dimension was not used by P. Group 1

TABLE 5.5

Perceiver Group 3 (15- 16 years). Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Similar	Opposite	
O. 1 (5- 6 years)	0.00.0)	31100.1)	3
O. 2 (10-11 years)	31100.1)	0.00.0)	3
O. 3 (15-16 years)	1108.3)	11191.7)	12
TOTAL	4122.2)	14177.8)	18
$\chi^2 = 12.69642$ $p < .01$ $df = 2$			

Perceiver Group 2 (10- 11 years). Use of Sub-categories within the Dimension in Describing Different Age Groups

This dimension was not used by P. Group 2



## DIMENSION NO. 6: TOTAL PERSONALITY

TABLE 6.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories				TOTAL		
	Undifferen- tiated Positive	Undifferen- tiated Neutral	Differen- tiated Positive	Differen- tiated Neutral			
P. 1 (3 - 6 years)	21(53.8)	13(33.3)	2(05.1)	2(05.1)	0(00.0)	39	
P. 2 (10 - 11 years)	52(61.9)	21(25.0)	3(03.6)	2(02.4)	4(04.8)	84	
P. 3 (15 - 16 years)	56(47.5)	9(07.6)	10(08.5)	10(08.5)	9(07.6)	242(0.3)	118
TOTAL	129(53.5)	43(17.8)	15(06.2)	13(05.4)	15(06.2)	266(10.3)	241

$\chi^2 = 42.95128$        $p < .001$        $df = 10$

 $\chi^2 = 42.95128$  $p < .001$  $df = 10$ 

TABLE 6.2

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

O. Group	Sub-categories					
	Undifferen- tiated Positive	Undifferen- tiated Negative	Differen- tiated Neutral	Differen- tiated Positive	Differen- tiated Negative	TOTAL
O. 1 (3 - 6 years)	39(48.7)	12(15.0)	6(07.5)	2(02.5)	4(05.0)	17(21.2)
O. 2 (10 - 11 years)	45(54.2)	19(22.9)	7(08.4)	3(03.6)	5(06.0)	4(04.8)
O. 3 (15 - 16 years)	45(57.7)	12(15.4)	2(02.6)	8(10.3)	6(07.7)	5(06.4)
TOTAL	129(53.5)	43(17.8)	15(06.2)	15(06.2)	241(2.8)	241
$\chi^2 = 22.81163$ p < .10						

 $\chi^2 = 22.81163$  $p < .01$  $df = 10$ 

TABLE 6.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories						
	Undifferen- tiated Positive	Undifferen- tiated Negative	Differen- tiated Neutral	Differen- tiated Positive	Differen- tiated Negative	Differen- tiated Neutral	TOTAL
0.1 (5 - 6 years)	9 (56.3)	5 (31.3)	2 (12.5)	0 (00.0)	0 (00.0)	0 (00.0)	16
0.2 (10 - 11 years)	6 (50.0)	4 (33.3)	0 (00.0)	0 (00.0)	2 (16.7)	0 (00.0)	12
0.3 (15 - 16 years)	6 (54.5)	4 (36.4)	0 (00.0)	1 (09.1)	0 (00.0)	0 (00.0)	11
TOTAL	21 (53.8)	13 (33.3)	2 (05.1)	1 (02.6)	2 (05.1)	0 (00.0)	39

$\chi^2 = 10.0272$       df = 10      p > .05

 $\chi^2 = 10.0272$  $p > .05$  $df = 10$ 

TABLE 6.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories						TOTAL
	Undifferen- tiated Positive	Undifferen- tiated Negative	Undifferen- tiated Neutral	Differen- tiated Positive	Differen- tiated Negative	Differen- tiated Neutral	
0.1 (3 - 6 years)	19(65.5)	6(20.7)	2(6.6)	1(3.3)	0(0.0)	1(3.3)	29
0.2 (10 - 11 years)	18(60.0)	10(33.3)	1(3.3)	0(0.0)	0(0.0)	1(3.3)	30
0.3 (15 - 16 years)	15(60.0)	5(20.0)	0(0.0)	1(4.0)	4(16.0)	0(0.0)	25
TOTAL	52(61.9)	21(25.0)	3(3.6)	2(2.4)	4(4.8)	2(2.4)	84

$\chi^2 = 14.60417$      $p > .05$      $df = 10$

 $\chi^2 = 14.60417$  $p > .05$  $df = 10$ 

TABLE 6.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories					
	Undifferen- tiated Positive	Undifferen- tiated Negative	Undifferen- tiated Neutral	Differen- tiated Positive	Differen- tiated Negative	Differen- tiated Neutral
0. 1 (3 - 6 years)	11(31.4)	1(02.9)	2(05.7)	3(07.9)	4(11.4)	16(45.5)
0. 2 (10 - 11 years)	21(51.2)	5(12.2)	6(14.6)	3(07.3)	3(07.3)	3(07.3)
0. 3 (15 - 16 years)	24(57.1)	3(07.1)	2(04.8)	6(14.3)	2(04.8)	5(11.9)
TOTAL	56(47.5)	9(07.6)	10(08.5)	10(08.5)	9(07.6)	24(20.3)

$\chi^2 = 27.98304$        $p < .01$       df = 10

 $\chi^2 = 27.98904$  $p < .01$  $df = 10$



## DIMENSION NO. 7: ABILITY AND POWER

TABLE 7.1

Relationship between Age of Perceived Person  
and Use of Sub-categories within the Dimension

P. Group	Sub-categories				
	Physical	Cognitive	Aesthetic	Constructive	Any Other
P. 1 (5-6 years)	3(04.5)	13(19.4)	5(07.5)	0(00.0)	43(64.2)
P. 2 (10-11 years)	3(01.9)	59(36.6)	8(05.0)	7(04.3)	6(03.7)
P. 3 (15-16 years)	2(01.2)	87(54.0)	11(06.8)	9(05.6)	44(27.3)
TOTAL	8(02.1)	159(40.9)	24(06.2)	16(04.1)	165(42.4)
$\chi^2 = 39.6324$	$p < .001$ df = 10				

TABLE 7.2

Relationship between Age of Perceived Person  
and Use of Sub-categories within the Dimension

O. Group	Sub-categories				
	Physical	Cognitive	Aesthetic	Constructive	Any Other
O. 1 (5-6 years)	4(03.0)	43(32.6)	12(09.1)	8(06.1)	58(43.9)
O. 2 (10-11 years)	2(01.9)	45(43.3)	5(04.8)	4(03.8)	42(40.4)
O. 3 (15-16 years)	2(01.3)	71(46.4)	7(04.6)	4(02.6)	65(42.5)
TOTAL	8(02.1)	159(40.9)	24(06.2)	16(04.1)	165(42.4)
$\chi^2 = 11.37159$	$p > .05$ df = 10				

TABLE 7.3

Perceiver Group 1 (5-6 years): Use of Sub-categories  
within the Dimension in Describing Different Age Groups

O. Group	Sub-categories				
	Physical	Cognitive	Aesthetic	Constructive	Any Other
O. 1 (5-6 years)	2(06.5)	5(16.1)	5(16.1)	0(00.0)	17(54.8)
O. 2 (10-11 years)	0(00.0)	5(13.3)	0(00.0)	0(00.0)	10(66.7)
O. 3 (15-16 years)	1(04.8)	3(14.3)	0(00.0)	0(00.0)	16(76.2)
TOTAL	3(04.5)	13(19.4)	5(07.5)	0(00.0)	43(64.2)
$\chi^2 = 10.55867$	$p > .05$ df = 10				

TABLE 7.4

Perceiver Group 2 (10-11 years): Use of Sub-categories  
within the Dimension in Describing Different Age Groups

O. Group	Sub-categories				
	Physical	Cognitive	Aesthetic	Constructive	Any Other
O. 1 (5-6 years)	1(01.4)	23(32.4)	7(09.9)	5(07.0)	32(45.1)
O. 2 (10-11 years)	2(03.7)	21(38.9)	1(01.9)	2(03.7)	25(46.3)
O. 3 (15-16 years)	0(00.0)	15(41.7)	0(00.0)	0(00.0)	21(58.3)
TOTAL	3(01.9)	59(36.6)	8(05.0)	7(04.3)	78(48.4)
$\chi^2 = 14.28577$	$p > .05$ df = 10				

TABLE 7.5

Perceiver Group 3 (15-16 years): Use of Sub-categories  
within the Dimension in Describing Different Age Groups

O. Group	Sub-categories				
	Physical	Cognitive	Aesthetic	Constructive	Any Other
O. 1 (5-6 years)	1(03.3)	15(50.0)	0(00.0)	3(10.0)	9(30.0)
O. 2 (10-11 years)	0(00.0)	19(54.3)	4(11.4)	2(05.7)	7(20.0)
O. 3 (15-16 years)	1(01.0)	53(55.2)	7(07.3)	4(04.2)	28(29.2)
TOTAL	2(01.2)	87(54.0)	11(06.8)	9(05.6)	44(27.3)
$\chi^2 = 8.82117$	$p > .05$ df = 10				





## DIMENSION No. 8: INTENTIONS AND ORIENTATIONS

TABLE 8.1

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

P. Group	Sub-categories			
	Cognitive	Aesthetic	Play	TOTAL
P. 1 (5 - 6 years)	0.00-.0	2.0(0.5)	4.1(21.1)	1.0(5.3)
P. 2 (10-11 years)	5.0(2.3)	20.0(9.1)	57.0(25.9)	82.0(36.3)
P. 3 (15-16 years)	15.0(2.9)	37.0(7.1)	216.0(41.7)	268.0(45.7)
TOTAL	20.0(2.6)	59.0(7.8)	277.0(36.6)	356.0(45.0)
$\chi^2 = 61.34453$ $p < .001$ $df = 10$				

TABLE 8.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories			
	Cognitive	Aesthetic	Play	TOTAL
O. 1 (5 - 6 years)	7.0(2.9)	26.0(10.7)	103.0(42.6)	136.0(56.3)
O. 2 (10-11 years)	6.0(2.8)	16.0(7.5)	69.0(32.4)	91.0(42.7)
O. 3 (15-16 years)	7.0(2.3)	17.0(5.6)	105.0(34.8)	129.0(42.7)
TOTAL	20.0(2.6)	59.0(7.8)	277.0(36.6)	356.0(45.0)
$\chi^2 = 19.52380$ $p < .05$ $df = 10$				

TABLE 8.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			
	Cognitive	Aesthetic	Play	TOTAL
O. 1 (5 - 6 years)	0.00-.0	1.0(7.1)	4.0(28.6)	5.0(35.7)
O. 2 (10-11 years)	0.00-.0	0.00-.0	0.00-.0	0.00-.0
O. 3 (15-16 years)	0.00-.0	1.25-.0	0.00-.0	1.25-.0
TOTAL	0.00-.0	2.25-.0	4.00-.0	6.25-.0
$\chi^2 = 11.3999$ $p > .05$ $df = 10$				

TABLE 8.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			
	Cognitive	Aesthetic	Play	TOTAL
O. 1 (5 - 6 years)	1.0(1.5)	8.0(11.9)	27.0(40.3)	36.0(54.7)
O. 2 (10-11 years)	4.0(4.6)	9.0(10.3)	16.0(18.4)	29.0(33.3)
O. 3 (15-16 years)	0.00-.0	3.0(4.5)	14.0(21.2)	17.0(25.7)
TOTAL	5.0(2.3)	20.0(9.1)	57.0(25.9)	82.0(36.3)
$\chi^2 = 20.45990$ $p > .05$ $df = 10$				

TABLE 8.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			
	Cognitive	Aesthetic	Play	TOTAL
O. 1 (5 - 6 years)	6.0(3.7)	17.0(10.6)	72.0(44.7)	95.0(59.0)
O. 2 (10-11 years)	2.0(1.6)	7.0(5.6)	53.0(42.4)	62.0(50.0)
O. 3 (15-16 years)	7.0(3.0)	13.0(5.6)	91.0(39.2)	111.0(48.8)
TOTAL	15.0(2.9)	37.0(7.1)	216.0(41.7)	268.0(45.7)
$\chi^2 = 17.39091$ $p > .05$ $df = 10$				



TABLE 9.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Happiness	Sub-categories			TOTAL
		Unhappiness	Anger	Any Other	
P. 1 (5- 6 years)	2125.0	5162.5	0100.0	1112.5	8
P. 2 (10-11 years)	5108.5	13122.0	21135.6	20133.9	59
P. 3 (15-16 years)	53127.6	10005.2	52127.1	77140.1	192
TOTAL	60123.2	28110.8	73128.2	98137.8	259
$\chi^2 = .44.70708$ $p < .001$ $df = 6$					

TABLE 9.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Happiness	Sub-categories			TOTAL
		Unhappiness	Anger	Any Other	
O. 1 (5- 6 years)	34128.8	6105.1	32127.1	48135.0	118
O. 2 (10-11 years)	7108.5	12114.6	27132.9	36143.9	82
O. 3 (15-16 years)	19132.2	10116.9	14123.7	14127.1	59
TOTAL	60123.2	28110.8	73128.2	98137.8	259
$\chi^2 = 21.77121$ $p < .001$ $df = 6$					

TABLE 9.3

Perceiver Group 1 (5- 6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Happiness	Sub-categories			TOTAL
		Unhappiness	Anger	Any Other	
O. 1 (5- 6 years)	0100.0	11100.1	0100.0	0100.0	1
O. 2 (10-11 years)	1125.0	3175.0	0100.0	0100.0	4
O. 3 (15-16 years)	1133.3	1133.3	0100.0	1133.3	3
TOTAL	2125.0	5162.5	0100.0	1112.5	8
$\chi^2 = 2.73333$ $p > .05$ $df = 6$					

TABLE 9.4

Perceiver Group 2 (10- 11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Happiness	Sub-categories			TOTAL
		Unhappiness	Anger	Any Other	
O. 1 (5- 6 years)	0100.0	1110.0	7170.0	2120.0	10
O. 2 (10-11 years)	0100.0	6119.4	11135.5	14145.2	31
O. 3 (15-16 years)	5127.8	6133.3	3116.7	4122.2	18
TOTAL	5108.5	13122.0	21135.6	20133.9	59
$\chi^2 = 20.78157$ $p < .01$ $df = 6$					

TABLE 9.5

Perceiver Group 3 (15- 16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Happiness	Sub-categories			TOTAL
		Unhappiness	Anger	Any Other	
O. 1 (5- 6 years)	3431.8	4103.7	25123.4	44141.1	107
O. 2 (10-11 years)	6112.8	3106.4	18134.0	22146.8	47
O. 3 (15-16 years)	1334.2	3107.9	11128.9	11128.9	38
TOTAL	53127.6	1005.2	52127.1	77140.1	192
$\chi^2 = 9.28848$ $p > .05$ $df = 6$					



TABLE 10.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories		
	Impulsive	Non-impulsive	TOTAL
P. 1 (5- 6 years)	0.00 (.0)	0.00 (.0)	0
P. 2 (10- 11 years)	2158 (.3)	1541 (.7)	36
P. 3 (15- 16 years)	9656 (.8)	73143 (.2)	169
TOTAL	117157 (.1)	88142 (.9)	205
$\chi^2 = 0.02830 \quad p > .05 \quad df = 2$			

TABLE 10.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories		
	Impulsive	Non-impulsive	TOTAL
O. 1 (5- 6 years)	3870 (.4)	1679 (.6)	54
O. 2 (10- 11 years)	2648 (.1)	28151 (.9)	54
O. 3 (15- 16 years)	53154 (.6)	44165 (.4)	97
TOTAL	117157 (.1)	88145 (.9)	205
$\chi^2 = 5.88747 \quad p < .05 \quad df = 2$			

Perceiver Group 1 (5- 6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups  
This dimension was not used by this group.

TABLE 10.4

Perceiver Group 2 (10- 11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Impulsive	Non-impulsive	TOTAL
O. 1 (5- 6 years)	11152 (.4)	1047 (.6)	21
O. 2 (10- 11 years)	1150 (.0)	1150 (.0)	2
O. 3 (15- 16 years)	9169 (.2)	4130 (.8)	13
TOTAL	21168 (.3)	15141 (.7)	36
$\chi^2 = 0.99843 \quad p > .05 \quad df = 2$			

TABLE 10.5

Perceiver Group 3 (15- 16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Impulsive	Non-impulsive	TOTAL
O. 1 (5- 6 years)	27161 (.8)	6118 (.2)	33
O. 2 (10- 11 years)	25148 (.1)	27151 (.9)	52
O. 3 (15- 16 years)	44152 (.4)	40147 (.6)	84
TOTAL	96156 (.8)	73143 (.2)	169
$\chi^2 = 10.49902 \quad p < .01 \quad df = 2$			



## DIMENSION NO. 11: WISHES AND VALUES

TABLE 11.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Animals and Objects	Sub-categories				TOTAL
		Knowing	Experiencing	Pragmatic	Social	Power
P.1 (5-6 years)	27(61.4)	1(02.3)	6(13.6)	0(00.0)	2(04.5)	0(00.0)
P.2 (10-11 years)	1(01.3)	7(09.2)	12(15.8)	14(18.4)	2(127.6)	1(114.5)
P.3 (15-16 years)	0(00.0)	42(14.9)	45(16.0)	34(12.1)	53(18.9)	85(30.2)
TOTAL	28(07.0)	50(12.5)	63(15.7)	48(12.0)	76(19.0)	94(23.9)

 $\chi^2 = 254.14556$   $p < .001$   $df = 12$ 

TABLE 11.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Animals and Objects	Sub-categories				TOTAL
		Knowing	Experiencing	Pragmatic	Social	Power
O.1 (5-6 years)	12(112.4)	6(06.2)	9(09.3)	12(12.4)	23(23.7)	27(27.8)
O.2 (10-11 years)	9(09.0)	15(15.0)	18(18.0)	1(11.1)	14(14.0)	15(15.0)
O.3 (15-16 years)	7(03.4)	29(14.2)	36(17.6)	25(12.3)	39(19.1)	54(26.5)
TOTAL	28(07.0)	50(12.5)	63(15.7)	48(12.0)	76(19.0)	94(23.9)

 $\chi^2 = 31.54893$   $p < .01$   $df = 12$ 

TABLE 11.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Animals and Objects	Sub-categories				TOTAL
		Knowing	Experiencing	Pragmatic	Social	Power
O.1 (5-6 years)	12(63.2)	0(00.0)	2(10.5)	0(00.0)	0(00.0)	5(26.3)
O.2 (10-11 years)	9(60.0)	1(06.7)	2(13.3)	0(00.0)	0(00.0)	3(20.0)
O.3 (15-16 years)	6(60.0)	0(00.0)	2(20.0)	0(00.0)	2(20.0)	0(00.0)
TOTAL	27(61.4)	1(02.3)	6(13.6)	0(00.0)	2(04.5)	8(18.2)

 $\chi^2 = 11.72046$   $p > .05$   $df = 12$ 

TABLE 11.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Animals and Objects	Sub-categories				TOTAL
		Knowing	Experiencing	Pragmatic	Social	Power
O.1 (5-6 years)	0(00.0)	4(16.7)	4(16.7)	3(12.5)	8(33.3)	4(16.7)
O.2 (10-11 years)	0(00.0)	3(08.3)	6(16.7)	7(19.4)	7(19.4)	8(20.2)
O.3 (15-16 years)	1(06.3)	0(00.0)	2(12.5)	5(31.3)	6(37.5)	1(06.3)
TOTAL	1(01.3)	7(09.2)	12(15.8)	14(18.4)	21(27.6)	13(14.5)

 $\chi^2 = 15.75702$   $p > .05$   $df = 12$ 

TABLE 11.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Animals and Objects	Sub-categories				TOTAL
		Knowing	Experiencing	Pragmatic	Social	Power
O.1 (5-6 years)	0(00.0)	2(03.7)	3(05.6)	9(16.7)	13(27.8)	23(42.6)
O.2 (10-11 years)	0(00.0)	1(12.2)	4(20.0)	5(10.2)	7(14.3)	9(18.4)
O.3 (15-16 years)	0(00.0)	29(16.3)	32(18.0)	20(11.2)	31(17.4)	53(29.8)
TOTAL	0(00.0)	42(14.9)	45(16.0)	34(12.1)	53(18.9)	85(30.2)

 $\chi^2 = 24.40431$   $p < .05$   $df = 12$





TABLE 12.1

Relationship between Age of Recipients and Use of Sub-categories within the Dimension

P. Group	Objects in the Movie	Sub-categories			TOTAL
		Activities in the Movie	Roles and Professions	Dispositional Quality	
P. 1 (5-6 years)	9125.71	2057.31	2105.71	0100.01	4111.41
P. 2 (10-11 years)	3103.71	46156.11	11113.41	15118.31	7108.51
P. 3 (15-16 years)	2101.81	27103.91	31127.41	25122.11	28124.81
TOTAL	14106.11	93140.41	44119.11	40117.41	39116.91

$\chi^2 = 64.25552$   $p < .001$   $df = 8$

TABLE 12.2

Relationship between Age of Recipients and Use of Sub-categories within the Dimension

O. Group	Objects in the Movie	Sub-categories			TOTAL
		Activities in the Movie	Roles and Professions	Dispositional Quality	
0. 1 (5-6 years)	3103.81	34143.61	12115.41	14117.91	15119.21
0. 2 (10-11 years)	4105.81	35147.81	12117.41	11115.91	9113.01
0. 3 (15-16 years)	7108.41	24131.31	20124.11	15118.11	13118.11
TOTAL	14106.11	93140.41	44119.11	40117.41	39116.91

$\chi^2 = 8.73990$   $p > .05$   $df = 8$

TABLE 12.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Objects in the Movie	Sub-categories			TOTAL
		Activities in the Movie	Roles and Professions	Dispositional Quality	
0. 1 (5-6 years)	3118.81	10162.51	0100.01	0100.01	3118.81
0. 2 (10-11 years)	2125.01	3137.51	2125.01	0100.01	1112.51
0. 3 (15-16 years)	4136.41	7163.61	0100.01	0100.01	0100.01
TOTAL	9125.71	20571.11	2105.71	0100.01	4111.41

$\chi^2 = 10.25583$   $p > .05$   $df = 8$

TABLE 12.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Objects in the Movie	Sub-categories			TOTAL
		Activities in the Movie	Roles and Professions	Dispositional Quality	
0. 1 (5-6 years)	0100.01	14153.81	3111.51	7126.91	2107.71
0. 2 (10-11 years)	1102.91	24168.61	3108.61	6117.11	1102.91
0. 3 (15-16 years)	2109.51	8138.11	5123.81	2109.51	4118.01
TOTAL	3103.71	46156.11	11113.41	15118.31	7108.51

$\chi^2 = 13.59529$   $p > .05$   $df = 8$

TABLE 12.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Objects in the Movie	Sub-categories			TOTAL
		Activities in the Movie	Roles and Professions	Dispositional Quality	
0. 1 (5-6 years)	0100.01	10127.81	9125.01	7119.41	10127.81
0. 2 (10-11 years)	1103.81	6123.11	7126.91	5119.21	7126.91
0. 3 (15-16 years)	2102.01	11121.61	15129.41	13125.51	11121.61
TOTAL	2101.81	27123.91	31127.41	26122.11	28124.81

$\chi^2 = 4.13512$   $p > .05$   $df = 8$



TABLE 13.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories			TOTAL
	Distortion	Acceptance As it is	Uncertainty	
P. 1 (5- 6 years)	0(00.0)	0(00.0)	0(00.0)	0
P. 2 (10- 11 years)	17(85.0)	0(00.0)	3(15.0)	20
P. 3 (15- 16 years)	27(139.7)	17(75.0)	24(135.3)	68
TOTAL	44(150.0)	17(19.3)	27(130.7)	88
$\chi^2 = 14.13024$ $p < .01$ $df = 4$				

TABLE 13.2

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

O. Group	Sub-categories			TOTAL
	Distortion	Acceptance As it is	Uncertainty	
0.1 (5- 6 years)	14(56.0)	0(0.0)	11(44.0)	25
0.2 (10- 11 years)	11(57.9)	3(15.8)	5(26.3)	19
0.3 (15- 16 years)	19(43.2)	14(31.8)	11(25.2)	44
TOTAL	44(50.0)	17(19.3)	27(30.7)	88
$\chi^2 = 19.03822$ $p < .001$ $df = 4$				

Perceiver Group 1 (5- 6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

This Dimension was not used by P. Group 1

TABLE 13.4

Perceiver Group 2 (10- 11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			TOTAL
	Distortion	Acceptance As it is	Uncertainty	
0.1 (5- 6 years)	8(88.9)	0(00.0)	1(11.1)	9
0.2 (10- 11 years)	6(100.0)	0(00.0)	0(00.0)	6
0.3 (15- 16 years)	3(60.0)	0(00.0)	2(40.0)	5
TOTAL	17(85.0)	0(00.0)	3(15.0)	20
$\chi^2 = 4.65359$ $p > .05$ $df = 4$				

TABLE 13.5

Perceivers Group 3 (15- 16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			TOTAL
	Distortion	Acceptance As it is	Uncertainty	
0.1 (5- 6 years)	4(37.5)	0(00.0)	10(62.5)	16
0.2 (10- 11 years)	5(38.5)	3(23.1)	5(38.5)	13
0.3 (15- 16 years)	16(61.0)	14(53.9)	9(23.0)	39
TOTAL	27(39.7)	17(25.0)	24(35.3)	68
$\chi^2 = 19.67317$ $p > .001$ $df = 4$				



TABLE 14.1

Relationship between Age of Perceiver and Use of Sub-categories within the Dimension

P. Group	Sub-categories		
	Sensitivity	Insensitivity	Uncertainty
P. 1 (5- 6 years)	0.00. 0)	3.75. 0)	1.75. 0)
P. 2 (10- 11 years)	24.85. 7)	3.10. 7)	1.03. 6)
P. 3 (15- 16 years)	5.0. 3)	10.16. 7)	0.00. 0)
TOTAL	74.80. 4)	16.17. 4)	2.02. 2)
$\chi^2 = 22.88893$ $p < .001$ $df = 4$			

TABLE 14.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories		
	Sensitivity	Insensitivity	Uncertainty
O. 1 (5- 6 years)	11.64. 7)	4.23. 5)	2.11. 8)
O. 2 (10- 11 years)	31.91. 2)	3.08. 8)	0.00. 0)
O. 3 (15- 16 years)	32.76. 0)	9.22. 0)	0.00. 0)
TOTAL	74.80. 4)	16.17. 4)	2.02. 2)
$\chi^2 = 12.15673$ $p < .05$ $df = 4$			

TABLE 14.3

Perceiver Group 1 (5- 6 years), Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Sensitivity	Insensitivity	Uncertainty
O. 1 (5- 6 years)	0.00. 0)	1.50. 0)	1.50. 0)
O. 2 (10- 11 years)	0.00. 0)	0.00. 0)	0.00. 0)
O. 3 (15- 16 years)	0.00. 0)	2.10. 0)	0.00. 0)
TOTAL	0.00. 0)	3.60. 0)	1.50. 0)
$\chi^2 = 1.33333$ $p > .05$ $df = 4$			

TABLE 14.4

Perceiver Group 2 (10- 11 years), Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Sensitivity	Insensitivity	Uncertainty
O. 1 (5- 6 years)	5.83. 3)	0. 0. 0)	1.16. 7)
O. 2 (10- 11 years)	1.3. 6. 7)	2.13. 3)	0.00. 0)
O. 3 (15- 16 years)	6.85. 7)	1.14. 3)	0.00. 0)
TOTAL	24.85. 7)	3.10. 7)	1.03. 6)
$\chi^2 = 4.49444$ $p > .05$ $df = 4$			

TABLE 14.5

Perceiver Group 3 (15- 16 years), Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Sensitivity	Insensitivity	Uncertainty
O. 1 (5- 6 years)	6.66. 7)	3.73. 3)	0.00. 0)
O. 2 (10- 11 years)	8.94. 7)	1.05. 3)	0.00. 0)
O. 3 (15- 16 years)	26.81. 3)	6.18. 8)	0.00. 0)
TOTAL	50.83. 3)	10.16. 7)	0.00. 0)
$\chi^2 = 3.67894$ $p > .05$ $df = 4$			



TABLE 15.1  
Relationship between Age of Perceivers and  
Use of Sub-categories within the Dimension

P. Group	Sub-categories			TOTAL
	Consistent	Inconsistent Both	Inconsistency as natural	
P. 1 (5-6 years)	3(13.3)	6(86.7)	0(00.0)	9
P. 2 (10-11 years)	9(16.4)	39(70.9)	2(03.6)	50(9.1)
P. 3 (15-16 years)	37(19.5)	112(58.9)	9(04.7)	158(31.6)
TOTAL	49(19.3)	157(61.8)	11(04.3)	177(44.6)

$\chi^2 = 5.83224$   $p > .05$   $df = 6$

TABLE 15.2

Relationship between Age of the Perceived Persons  
and Use of Sub-categories within the Dimension

O. Group	Sub-categories			TOTAL
	Consistent	Inconsistent Both	Inconsistency as natural	
O. 1 (5-6 years)	11(13.9)	44(55.7)	7(08.9)	79
O. 2 (10-11 years)	17(21.2)	51(63.7)	11(13.7)	80
O. 3 (15-16 years)	21(22.1)	62(65.3)	9(09.5)	95
TOTAL	49(19.3)	157(61.8)	11(104.3)	177(44.6)

$\chi^2 = 12.58639$   $p < .05$   $df = 6$

TABLE 15.3  
Perceiver Group 1 (5-6 years): Use of Sub-categories  
within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			TOTAL
	Consistent	Inconsistent Both	Inconsistency as natural	
O. 1 (5-6 years)	3(42.9)	4(57.1)	0(00.0)	7
O. 2 (10-11 years)	0(00.0)	0(00.0)	0(00.0)	0
O. 3 (15-16 years)	0(00.0)	2(100.0)	0(00.0)	2
TOTAL	3(13.3)	6(66.7)	0(00.0)	9

$\chi^2 = 1.28571$   $p > .05$   $df = 6$

TABLE 15.4  
Perceiver Group 2 (10-11 years): Use of Sub-categories  
within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			TOTAL
	Consistent	Inconsistent Both	Inconsistency as natural	
O. 1 (5-6 years)	1(04.5)	19(86.4)	2(09.1)	22
O. 2 (10-11 years)	5(25.4)	12(70.6)	0(00.0)	17
O. 3 (15-16 years)	3(16.8)	8(50.0)	0(00.0)	16
TOTAL	9(16.4)	39(70.9)	2(03.6)	55

$\chi^2 = 20.61745$   $p < .01$   $df = 6$

TABLE 15.5

Perceiver Group 3 (15-16 years): Use of Sub-categories  
within the Dimension in Describing Different Age Groups

O. Group	Sub-categories			TOTAL
	Consistent	Inconsistent Both	Inconsistency as natural	
O. 1 (5-6 years)	7(14.0)	21(42.0)	5(10.0)	30
O. 2 (10-11 years)	12(19.0)	39(61.9)	11(17.5)	63
O. 3 (15-16 years)	18(23.4)	52(67.5)	3(03.9)	77
TOTAL	37(19.5)	112(58.9)	9(04.7)	158

$\chi^2 = 24.18431$   $p < .001$   $df = 6$





TABLE 16.1  
Relationship between Age of Perceiver and  
Use of Sub-categories within the Dimension

P. Group	Sub-categories		TOTAL
	Changeable	Unchangeable	
P.1 (5-6 years)	1(100.1)	0(00.0)	1
P.2 (10-11 years)	8(100.1)	0(00.0)	8
P.3 (15-16 years)	47(90.4)	5(09.6)	52
TOTAL	56(91.8)	5(08.2)	61
$\chi^2 = 0.84265$			$p > .05$ df = 2

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

This Dimension was not used by P. Group 2

TABLE 16.2  
Relationship between Age of Perceiver and  
Use of Sub-categories within the Dimension

O. Group	Sub-categories		TOTAL
	Changeable	Unchangeable	
O.1 (5-6 years)	25(86.2)	4(13.7)	29
O.2 (10-11 years)	24(100.1)	0(00.0)	24
O.3 (15-16 years)	7(87.5)	1(12.5)	8
TOTAL	56(91.8)	5(08.2)	61
$\chi^2 = 4.03317$			$p > .05$ df = 2

TABLE 16.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		TOTAL
	Changeable	Unchangeable	
O.1 (5-6 years)	18(81.8)	4(18.1)	22
O.2 (10-11 years)	22(100.1)	0(00.0)	22
O.3 (15-16 years)	7(87.5)	1(12.5)	8
TOTAL	47(90.4)	5(09.6)	52
$\chi^2 = 4.71784$			$p > .05$ df = 2

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

This Dimension was not used by P. Group 2



TABLE 17.1

Relationship between Age of the Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories Independence Dependence	TOTAL
P.1 (5-6 years)	6(28.6) 15(71.4)	21
P.2 (10-11 years)	47(56.6) 36(43.4)	83
P.3 (15-16 years)	12(156.5) 93(43.5)	214
TOTAL	174(64.7) 144(45.3)	318
$\chi^2 = 12.75839$ $p < .01$ $df = 2$		

TABLE 17.2

Relationship between Age of the Perceivers and Use of Sub-categories within the Dimension

O. Group	Sub-categories Independence Dependence	TOTAL
O.1 (5-6 years)	65(57.5) 48(42.5)	113
O.2 (10-11 years)	62(52.1) 57(47.9)	119
O.3 (15-16 years)	47(54.7) 39(45.3)	86
TOTAL	174(54.7) 144(45.3)	318
$\chi^2 = 6.15846$ $p < .05$ $df = 2$		

TABLE 17.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories Independence Dependence	TOTAL
O.1 (5-6 years)	3(37.5) 5(62.5)	8
O.2 (10-11 years)	0(0.0) 6(100.0)	6
O.3 (15-16 years)	3(42.9) 4(57.1)	7
TOTAL	6(28.6) 15(71.4)	21
$\chi^2 = 6.02357$ $p < .05$ $df = 2$		

TABLE 17.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories Independence Dependence	TOTAL
O.1 (5-6 years)	15 (57.7) 11(42.3)	26
O.2 (10-11 years)	16(59.3) 11(40.7)	27
O.3 (15-16 years)	16(59.3) 14(46.6)	30
TOTAL	47(56.6) 36(43.3)	83
$\chi^2 = 1.85921$ $p > .05$ $df = 2$		

TABLE 17.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories Independence Dependence	TOTAL
O.1 (5-6 years)	47(59.5) 32(40.5)	79
O.2 (10-11 years)	46(53.5) 40(46.5)	86
O.3 (15-16 years)	28(57.1) 21(42.9)	49
TOTAL	121(56.5) 93(43.5)	214
$\chi^2 = 0.61366$ $p > .05$ $df = 2$		



## DIMENSION NO. 18: AFFILIATION-NON-AFFILIATION

TABLE 18.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	O. Group	Sub-categories			
		Affiliation	Non-Affiliation	Indifference	TOTAL
P.1 (5-6 years)		45174.71	22125.31	0.00.01	0.00.01
P.2 (10-11 years)		149159.61	95138.01	5102.01	1100.41
P.3 (15-16 years)		299163.81	156132.21	16003.31	13102.71
TOTAL		513162.51	273133.31	21102.61	14101.71
$\chi^2 = 16.2591$		$p < .01$ df = 6			

TABLE 18.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	P. Group	Sub-categories			
		Affiliation	Non-Affiliation	Indifference	TOTAL
0.1 (5-6 years)		159162.81	86132.01	7102.61	7102.61
0.2 (10-11 years)		169165.31	84132.41	5101.91	1100.41
0.3 (15-16 years)		175159.71	103135.21	9103.11	6102.01
TOTAL		513162.51	273133.31	21102.61	14101.71
$\chi^2 = 5.9948$		$p > .05$ df = 6			

TABLE 18.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	P. Group	Sub-categories			
		Affiliation	Non-Affiliation	Indifference	TOTAL
0.1 (5-6 years)		22175.91	7124.11	0.00.01	0.00.01
0.2 (10-11 years)		35192.11	3107.91	0.00.01	0.00.01
0.3 (15-16 years)		8140.01	12140.01	0.00.01	0.00.01
TOTAL		65174.71	22125.31	0.00.01	0.00.01
$\chi^2 = 18.86046$		$p < .01$ df = 6			

TABLE 18.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	P. Group	Sub-categories			
		Affiliation	Non-Affiliation	Indifference	TOTAL
0.1 (5-6 years)		50145.81	23130.31	3103.91	0.00.01
0.2 (10-11 years)		48154.51	38143.21	1101.11	1101.11
0.3 (15-16 years)		53159.31	34139.51	1101.21	0.00.01
TOTAL		149159.61	95138.01	5102.01	1100.41
$\chi^2 = 6.65086$		$p > .05$ df = 6			

TABLE 18.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	P. Group	Sub-categories			
		Affiliation	Non-Affiliation	Indifference	TOTAL
0.1 (5-6 years)		97159.11	56134.11	4102.41	7104.31
0.2 (10-11 years)		86164.71	43132.31	4103.01	0.00.01
0.3 (15-16 years)		116162.01	57130.51	8104.31	6103.21
TOTAL		299163.81	156132.21	16103.31	13102.71
$\chi^2 = 6.94403$		$p > .05$ df = 6			



TABLE 19.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories		
	Nurturance	Non-nurturance	Both
P. 1 (5-6 years)	49(45.4)	58(53.7)	1(00.9)
P. 2 (10-11 years)	17(41.4)	24(58.1)	2(00.5)
P. 3 (15-16 years)	25(47.5)	27(51.1)	7(01.3)
TOTAL	473(44.9)	571(54.2)	10(00.9)
$\chi^2 = 5.64398$ $p > .05$ $df = 4$			

TABLE 19.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories		
	Nurturance	Non-nurturance	Both
0.1 (5-6 years)	143(46.3)	164(53.1)	2(00.6)
0.2 (10-11 years)	133(40.3)	192(58.2)	5(01.5)
0.3 (15-16 years)	197(47.5)	215(51.8)	3(00.7)
TOTAL	473(44.9)	571(54.2)	10(00.9)
$\chi^2 = 5.40691$ $p > .05$ $df = 4$			

TABLE 19.3

Perceiver Group 1 (5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Nurturance	Non-nurturance	Both
0.1 (5-6 years)	17(43.6)	21(53.8)	1(02.6)
0.2 (10-11 years)	13(61.9)	8(38.1)	0(00.0)
0.3 (15-16 years)	19(39.6)	29(60.4)	0(00.0)
TOTAL	49(45.4)	58(53.7)	1(00.9)
$\chi^2 = 4.77176$ $p > .05$ $df = 4$			

TABLE 19.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Nurturance	Non-nurturance	Both
0.1 (5-6 years)	48(45.7)	57(54.3)	0(00.0)
0.2 (10-11 years)	60(36.4)	104(63.6)	1(00.6)
0.3 (15-16 years)	63(44.1)	76(55.2)	1(00.7)
TOTAL	171(44.4)	240(58.1)	2(00.5)
$\chi^2 = 3.57571$ $p > .05$ $df = 4$			

TABLE 19.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Nurturance	Non-nurturance	Both
0.1 (5-6 years)	78(47.3)	86(52.1)	1(00.6)
0.2 (10-11 years)	60(41.7)	80(55.6)	4(02.8)
0.3 (15-16 years)	115(51.3)	107(47.8)	2(00.9)
TOTAL	253(47.5)	273(51.2)	7(01.3)
$\chi^2 = 6.08685$ $p > .05$ $df = 4$			





TABLE 20.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension				
P. Group	Sub-categories		TOTAL	
	Dominance	Submission		
P.1 (5- 6 years)	0(0.0)	0(0.0)	0	
P.2 (10- 11 years)	37(74.0)	13(26.0)	50	
P.3 (15- 16 years)	145(78.8)	39(21.2)	184	
TOTAL	182(77.8)	52(22.2)	234	
$\chi^2 = 0.5205 \quad p > .05 \quad df = 2$				

TABLE 20.2

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension				
O. Group	Sub-categories		TOTAL	
	Dominance	Submission		
O.1 (5- 6 years)	76(73.8)	27(26.2)	103	
O.2 (10- 11 years)	32(78.0)	9(22.0)	41	
O.3 (15- 16 years)	74(82.2)	16(17.8)	90	
TOTAL	182(77.8)	52(22.2)	234	
$\chi^2 = 1.9769 \quad p > .05 \quad df = 2$				

Perceiver Group 1 (5- 6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

This dimension was not used by P. Group 1

TABLE 20.4

Perceiver Group 2 (10- 11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups				
O. Group	Sub-categories		TOTAL	
	Dominance	Submission		
O.1 (5- 6 years)	11(61.1)	7(38.9)	18	
O.2 (10- 11 years)	8(72.7)	3(27.3)	11	
O.3 (15- 16 years)	18(85.7)	3(14.3)	21	
TOTAL	37(74.0)	13(26.0)	50	
$\chi^2 = 3.06120 \quad p > .05 \quad df = 2$				

TABLE 20.5

Perceiver Group 3 (15- 16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups				
O. Group	Sub-categories		TOTAL	
	Dominance	Submission		
O.1 (5- 6 years)	45(76.5)	20(23.5)	65	
O.2 (10- 11 years)	24(80.0)	6(20.0)	30	
O.3 (15- 16 years)	56(81.2)	13(18.8)	69	
TOTAL	145(78.8)	39(21.2)	184	
$\chi^2 = 0.53196 \quad p > .05 \quad df = 2$				



## DIMENSION NO. 21: CONSISTENCY IN INTERPERSONAL BEHAVIOR

TABLE 21.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group		Sub-categories			TOTAL
		Consistency	In-	Inconsistency as Natural	
P.1	(5-6 years)	17(58.6)	12(41.4)	0(0.0)	29
P.2	(10-11 years)	13(20.6)	43(68.3)	4(6.1)	63
P.3	(15-16 years)	42(32.8)	57(44.5)	22(17.2)	128
TOTAL		72(32.7)	112(50.9)	26(11.8)	220
$\chi^2 = 23.72804$		$p < .001$ df = 6			

TABLE 21.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group		Sub-categories			TOTAL
		Consistency	In-	Inconsistency as Natural	
O.1	(5-6 years)	22(31.4)	32(45.7)	3(04.3)	70
O.2	(10-11 years)	17(24.6)	40(58.0)	6(08.7)	69
O.3	(15-16 years)	33(40.7)	40(48.4)	1(01.2)	81
TOTAL		72(32.7)	112(50.9)	26(11.8)	220
$\chi^2 = 12.62963$		$p < .05$ df = 6			

TABLE 21.3

Perceiver Group 1(5-6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group		Sub-categories			TOTAL
		Consistency	In-	Inconsistency as Natural	
O.1	(5-6 years)	8(53.3)	7(46.7)	0(0.0)	15
O.2	(10-11 years)	4(80.0)	1(20.0)	0(0.0)	5
O.3	(15-16 years)	5(55.6)	4(44.4)	0(0.0)	9
TOTAL		17(58.6)	12(41.4)	0(0.0)	29
$\chi^2 = 1.14989$		$p > .05$ df = 6			

TABLE 21.4

Perceiver Group 2 (10-11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group		Sub-categories			TOTAL
		Consistency	In-	Inconsistency as Natural	
O.1	(5-6 years)	6(25.0)	15(62.5)	3(12.5)	24
O.2	(10-11 years)	1(04.3)	21(91.3)	0(0.0)	23
O.3	(15-16 years)	6(37.5)	7(43.8)	0(0.0)	16
TOTAL		13(20.6)	43(68.3)	3(4.8)	63
$\chi^2 = 19.11732$		$p < .01$ df = 6			

TABLE 21.5

Perceiver Group 3 (15-16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group		Sub-categories			TOTAL
		Consistency	In-	Inconsistency as Natural	
O.1	(5-6 years)	8(25.8)	10(32.3)	0(0.0)	31
O.2	(10-11 years)	12(29.3)	18(63.9)	6(14.6)	41
O.3	(15-16 years)	22(39.3)	29(51.8)	1(01.8)	56
TOTAL		42(32.8)	57(44.5)	7(05.5)	128
$\chi^2 = 27.30660$		$p < .001$ df = 6			



TABLE 22.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	Sub-categories		
	Exhibition	Seclusion	TOTAL
P.1 (5 - 6 years)	0(00.0)	0(00.0)	0
P.2 (10 - 11 years)	7(70.0)	3(30.0)	10
P.3 (15 - 16 years)	113(74.3)	39(25.7)	152
TOTAL	120(74.1)	42(25.9)	162
$\chi^2 = 0.09211$ $p > .05$ $df = 2$			

TABLE 22.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	Sub-categories		
	Exhibition	Seclusion	TOTAL
O.1 (5 - 6 years)	46(71.9)	18(28.1)	64
O.2 (10 - 11 years)	26(88.7)	3(10.3)	29
O.3 (15 - 16 years)	48(65.6)	21(30.4)	69
TOTAL	120(74.1)	42(25.9)	162
$\chi^2 = 4.55760$ $p > .05$ $df = 2$			

Perceiver Group 1 (5 - 6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

This dimension was not used by P. Group 1

TABLE 22.4

Perceiver Group 2 (10 - 11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Exhibition	Seclusion	TOTAL
O.1 (5 - 6 years)	0(00.0)	0(00.0)	0
O.2 (10 - 11 years)	0(00.0)	1(100.0)	1
O.3 (15 - 16 years)	7(77.8)	2(22.2)	9
TOTAL	7(70.0)	3(30.0)	10
$\chi^2 = 2.59259$ $p > .05$ $df = 2$			

TABLE 22.5

Perceiver Group 3 (15 - 16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	Sub-categories		
	Exhibition	Seclusion	TOTAL
O.1 (5 - 6 years)	46(71.9)	18(28.1)	64
O.2 (10 - 11 years)	26(92.9)	2(7.1)	28
O.3 (15 - 16 years)	41(68.3)	19(31.7)	60
TOTAL	113(74.3)	39(25.7)	152
$\chi^2 = 6.37205$ $p < .05$ $df = 2$			



TABLE 23.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension					
O. Group	Sub-categories	Positive	Negative	Compelling	Neutral
0.1 (5 - 6 years)	21(30.0)	19(27.1)	24(34.3)	6(08.6)	70
0.2 (10 - 11 years)	10(15.6)	33(51.6)	16(25.0)	5(07.8)	64
0.3 (15 - 16 years)	7(26.9)	13(50.0)	6(23.1)	0(00.0)	26
TOTAL	38(23.1)	65(40.6)	46(28.7)	11(06.9)	160
$\chi^2 = 12.13215$ $p > .05$ $df = 6$					

TABLE 23.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension					
P. Group	Sub-categories	Positive	Negative	Compelling	Neutral
P.1 (5 - 6 years)	0(00.0)	21(100.0)	0(00.0)	0(00.0)	2
P.2 (10 - 11 years)	9(17.6)	28(54.9)	14(27.5)	0(00.0)	51
P.3 (15 - 16 years)	29(27.1)	35(32.7)	37(29.9)	11(10.3)	107
TOTAL	38(23.7)	65(40.6)	46(28.7)	11(06.9)	166
$\chi^2 = 13.82853$ $p < .05$ $df = 6$					

Perceiver Group 1 (5 - 6 years): Use of Sub-categories within the Dimension in Describing Different Age Groups

This dimension was not used by O Group 1

TABLE 23.4

Perceiver Group 2 (10 - 11 years): Use of Sub-categories within the Dimension in Describing Different Age Groups					
O. Group	Sub-categories	Positive	Negative	Compelling	Neutral
0.1 (5 - 6 years)	5(33.3)	2(13.3)	8(53.3)	0(00.0)	15
0.2 (10 - 11 years)	4(13.8)	19(65.5)	6(20.7)	0(00.0)	29
0.3 (15 - 16 years)	0(00.0)	7(100.0)	0(00.0)	0(00.0)	7
TOTAL	9(17.6)	28(54.9)	14(27.5)	0(00.0)	51
$\chi^2 = 17.54526$ $p < .01$ $df = 6$					

TABLE 23.5

Perceiver Group 3 (15 - 16 years): Use of Sub-categories within the Dimension in Describing Different Age Groups					
O. Group	Sub-categories	Positive	Negative	Compelling	Neutral
0.1 (5 - 6 years)	16(29.1)	17(30.9)	16(29.1)	6(10.9)	55
0.2 (10 - 11 years)	6(18.2)	12(36.4)	10(30.3)	5(15.2)	33
0.3 (15 - 16 years)	7(36.8)	6(31.6)	6(31.6)	0(00.0)	19
TOTAL	29(27.1)	35(32.7)	32(29.9)	11(10.3)	107
$\chi^2 = 4.67863$ $p > .05$ $df = 6$					





TABLE 24.1

Relationship between Age of Perceivers and Use of Sub-categories within the Dimension

P. Group	O. Group	Sub-categories			TOTAL
		Conformity to Norms	Non-conformity to Norms	Perception of "Ought"	
P.1 (5-6 years)	30(50.0)	14(26.7)	14(23.3)	0(0.0)	60
P.2 (10-11 years)	40(32.8)	42(34.4)	24(19.7)	14(13.1)	122
P.3 (15-16 years)	74(52.1)	48(33.8)	14(9.9)	6(04.2)	142
TOTAL	144(44.4)	106(32.7)	52(16.6)	22(06.8)	324
$\chi^2 = 25.86548$ $p < .001$ $df = 6$					

TABLE 24.2

Relationship between Age of Perceived Persons and Use of Sub-categories within the Dimension

O. Group	P. Group	Sub-categories			TOTAL
		Conformity to Norms	Non-conformity to Norms	Perception of "Ought"	
0.1 (5-6 years)	45(50.0)	24(26.7)	16(17.8)	5(05.6)	90
0.2 (10-11 years)	34(41.0)	24(28.9)	10(12.0)	15(18.1)	83
0.3 (15-16 years)	65(43.0)	58(38.4)	26(17.2)	20(13.1)	151
TOTAL	144(44.4)	106(32.7)	52(16.6)	22(06.8)	324
$\chi^2 = 27.31586$ $p < .001$ $df = 6$					

TABLE 24.3

Perceiver Group (15-6 years)-Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	P. Group	Sub-categories			TOTAL
		Conformity to Norms	Non-conformity to Norms	Perception of "Ought"	
0.1 (5-6 years)	12(63.2)	6(31.6)	1(05.3)	0(0.0)	19
0.2 (10-11 years)	7(70.0)	2(20.0)	1(10.0)	0(0.0)	10
0.3 (15-16 years)	11(35.3)	8(25.8)	12(38.7)	0(0.0)	31
TOTAL	30(50.0)	14(26.7)	14(23.3)	0(0.0)	60
$\chi^2 = 9.67351$ $p > .05$ $df = 6$					

TABLE 24.4

Perceiver Group (10-11 years)-Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	P. Group	Sub-categories			TOTAL
		Conformity to Norms	Non-conformity to Norms	Perception of "Ought"	
0.1 (5-6 years)	11(29.7)	12(32.4)	14(37.8)	0(0.0)	37
0.2 (10-11 years)	10(26.3)	14(36.8)	0(0.0)	14(36.8)	38
0.3 (15-16 years)	19(40.4)	16(34.0)	10(21.3)	2(04.3)	47
TOTAL	40(72.8)	42(34.4)	24(19.7)	14(13.1)	122
$\chi^2 = 39.22375$ $p < .001$ $df = 6$					

TABLE 24.5

Perceiver Group (15-16 years)-Use of Sub-categories within the Dimension in Describing Different Age Groups

O. Group	P. Group	Sub-categories			TOTAL
		Conformity to Norms	Non-conformity to Norms	Perception of "Ought"	
0.1 (5-6 years)	22(64.7)	6(17.6)	1(02.9)	5(14.7)	34
0.2 (10-11 years)	17(48.6)	8(22.9)	9(25.7)	1(02.9)	35
0.3 (15-16 years)	35(47.9)	34(46.6)	4(05.5)	0(0.0)	73
TOTAL	74(52.1)	48(33.8)	14(9.9)	6(04.2)	142
$\chi^2 = 32.82413$ $p < .001$ $df = 6$					



















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